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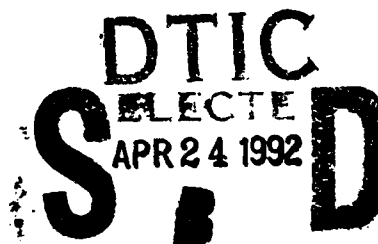
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INTEGRATED INFORMATION SUPPORT SYSTEM (IISS)  
Volume VIII - User Interface Subsystem  
Part 35 - Application Interface Unit Test Plan

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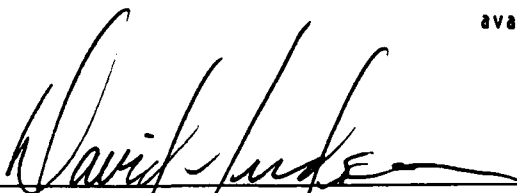
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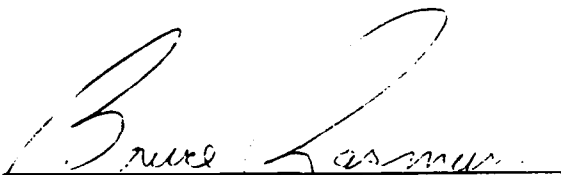
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## FOREWORD

This technical report covers work performed under Air Force Contract F33600-87-C-0464, DAPro Project. This contract is sponsored by the Manufacturing Technology Directorate, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio. It was administered under the technical direction of Mr. Bruce A. Rasmussen, Branch Chief, Integration Technology Division, Manufacturing Technology Directorate, through Mr. David L. Judson, Project Manager. The Prime Contractor was Integration Technology Services, Software Programs Division, of the Control Data Corporation, Dayton, Ohio, under the direction of Mr. W. A. Osborne. The DAPro Project Manager for Control Data Corporation was Mr. Jimmy P. Maxwell.

The DAPro project was created to continue the development, test, and demonstration of the Integrated Information Support System (IISS). The IISS technology work comprises enhancements to IISS software and the establishment and operation of IISS test bed hardware and communications for developers and users.

The following list names the Control Data Corporation subcontractors and their contributing activities:

<u>SUBCONTRACTOR</u>	<u>ROLE</u>
Control Data Corporation	Responsible for the overall Common Data Model design development and implementation, IISS integration and test, and technology transfer of IISS.
D. Appleton Company	Responsible for providing software information services for the Common Data Model and IDEF1X integration methodology.
ONTEK	Responsible for defining and testing a representative integrated system base in Artificial Intelligence techniques to establish fitness for use.
Simpact Corporation	Responsible for Communication development.
Structural Dynamics Research Corporation	Responsible for User Interfaces, Virtual Terminal Interface, and Network Transaction Manager design, development, implementation, and support.
Arizona State University	Responsible for test bed operations and support.

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DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
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## SECTION 1

### GENERAL

#### 1.1 Purpose

This unit test plan establishes the methodology and procedures used to adequately test the capabilities of the computer program identified as the Application Interface known in this document as the AI. The AI is one configuration item of the Integrated Information Support System (IISS) User Interface (UI). It consists of Application Interface callable routines.

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- [11] Structural Dynamics Research Corporation, Form Processor Unit Test Plan, UTP620344200, 31 May 1988.

### 11.3 Terms and Abbreviations

Application Interface: (AI), subset of the IISS User Interface that consists of the callable routines that are linked with applications that use the Form Processor or Virtual Terminal. The AI enables applications to be hosted on computers other than the host of the User Interface.

Application Process: (AP), a cohesive unit of software that can be initiated as a unit to perform some function or functions.

Communication Services: allows on host interprocess communication and inter-host communication between the various Test Bed subsystems.

Communication Subsystem: (COMM), IISS subsystem that provides communication services to the Test Bed and subsystems.

Computer Program Configuration Item: (CPCI), an aggregation of computer programs or any of their discrete portions, which satisfies an end-use function.

Field: two dimensional space on a terminal screen.

Field Pointer: indicates the ITEM which contains the current cursor position.

Form: structured view which may be imposed on windows or other forms. A form is composed of fields. These fields may be defined as forms, items, and windows.

Form Definition: (FD), forms definition language after compilation. It is read at runtime by the Form Processor.

Forms Definition Language: (FDL), the language in which electronic forms are defined.



Form Hierarchy: a graphic representation of the way in which forms, items and windows are related to their parent form.

Form Processor: (FP), subset of the IISS User Interface that consists of a set of callable execution time routines available to an application program for form processing.

IISS Function Screen: the first screen that is displayed after logon. It allows the user to specify the function he wants to access and the device type and device name on which he is working.

Integrated Information Support System: (IISS), a computing environment used to investigate, demonstrate, test the concepts and produce application for information management and information integration in the context of Aerospace Manufacturing. The IISS addresses the problems of integration of data resident on heterogeneous data bases supported by heterogeneous computers interconnected via a Local Area Network.

Message: descriptive text which may be returned in the standard message line on the terminal screen. They are used to warn of errors or provide other user information.

Message Line: a line on the terminal screen that is used to display messages.

Network Transaction Manager: (NTM), IISS subsystem that performs the coordination, communication and housekeeping functions required to integrate the Application Processes and System Services resident on the various hosts into a cohesive system.

Qualified Name: the name of a form, item or window preceded by the hierarchy path so that it is uniquely identified.

User Data: data which is either input by the user or output by the application programs to items.

User Interface: (UI), IISS subsystem that controls the user's terminal and interfaces with the rest of the system. The UI consists of two major subsystems: the User Interface Development System (UIDS) and the User Interface Management System (UIMS).

User Interface Management System: (UIMS), the runtime UI. It consists of the Form Processor, Virtual Terminal, Application Interface, the User Interface Services and the Text Editor.

User Interface/Virtual Terminal Interface: (UI/VTI), another name for the User Interface.

Virtual Terminal: (VT), subset of the IISS User Interface that performs the interfacing between different terminals and the UI. This is done by defining a specific set of terminal features and protocols which must be supported by the UI software which constitutes the virtual terminal definition. Specific terminals are then mapped against the virtual terminal software by specific software modules written for each type of real terminal supported.

Window: dynamic area of a terminal screen on which predefined forms may be placed at run time.

## SECTION 2

### DEVELOPMENT ACTIVITY

#### 2.1 Statement of Pretest Activity

During system development, the computer programs were tested progressively. Functionality was incrementally tested, and as bugs were discovered by this testing, the software was corrected.

Each Application Interface callable routine was tested individually through Application Interface development. A test program, ARTEST, was developed as an easy means of testing changes to the Application Interface. This test program allows a developer to type in commands that are translated into the appropriate Application Interface calls. With this test program all Application Interface callable routines may be executed.

All pretesting activity was conducted by the individual program developer in a manual mode. The developer would manually enter data onto the screen and observe the results. Any errors were noted by the developer, and corrections to the Application Interface software were then made after a testing session.

#### 2.2 Pretest Activity Results

The pretest activity was very successful in the elimination of programming bugs so that at release time only a few bugs were found in the Application Interface. The development of the test program, ARTEST, has proved very beneficial since as new functionality was added to the Application Interface, ARTEST was also updated to test this functionality. ARTEST is the major test tool for the Unit Test Plan of the Application Interface.

## SECTION 3

### SYSTEM DESCRIPTION

#### 3.1 System Description

The Application Interface consists of a set of callable execution time routines that allows an application program to send/receive formatted screens to/from various terminals and to perform terminal control functions independent of the terminal type. The Application Interface translates the application's call for form processing into a message which is then sent to the User Interface Monitor of the Form Processor.

The required input and the resulting output of these tests is documented in detail in Section 5.3. The general testing method is the entry of commands on the ARTEST form Command Line item and the translation of this command by the ARTEST program into a call to the appropriate Application Interface routine. Each Application Interface routine as found in the Application Interface Development Specification is to be exercised. The resulting output is observed on the ARTEST form.

The following keys are used to move within forms (using the VT100 terminal as an example): the <ENTER> key is used to activate all commands; the <TAB> key is used to move from field to field within the form; and the arrow keys are used to move within fields. In addition, ESC TAB is a reverse TAB. The keypad layouts for the various modes are shown Appendix A.

#### 3.2 Testing Schedule

The execution of the Application Interface is dependent upon the NTM subsystem of the IISS. Testing of the Application Interface must be done only after the NTM has been successfully tested. In this unit test, the Application Interface is dependent on the Form Processor (FP) and on the Virtual Terminal (VT). In fact, all three Configuration Items are to be tested together.

#### 3.3 First Location Testing

These tests of the Application Interface require the following:

Equipment: Air Force VAX, terminals supported by the Virtual Terminal as listed in the UI Terminal Operator's Guide.

Support Software: the Integrated Information Support System, the Oracle database management system, C run-time libraries.

Personnel: One integrator familiar with the IISS.

Training: The AI User manual has been previously provided with the current release.

Deliverables: The Application Interface component of the IISS UI/VTI.

Test Materials: This test may be run interactively by inputting the appropriate data and observing the output as outlined in this test plan. A script file has been created to run this unit test plan and save the resulting output.

Security considerations: None.

#### 3.4 Subsequent Location Testing

The requirements as listed above need to be met; however, in subsequent testing it is advantageous to create a script file of the outlined tests and run this saving the output of the test for future comparisons.

## SECTION 4

### SPECIFICATIONS AND EVALUATIONS

#### 4.1 Test Specification

This test uses the program ARTEST to test the following areas of functionality as specified in section 3.2 of the Application Interface Development Specification:

- o Form processing
- o User Profile Maintenance
- o Virtual Terminal Pass-through

The following sections list the AI routines that handle the particular area of functionality, where appropriate. The associated figures refer to the specific activities performed in section 5.3 to test each area.

##### 4.1.1 Form Processing

Controlling the Form Processor:

INITFP - Figures 2a,b  
TERMFP - Figures 58a,b  
SETDQN - Figures 32a, 32d-f  
GETDQN - Figures 32b,c

Opening and Closing Forms:

OPNFRM - Figures 8a-d  
CLSFRM - Figures 15a-c

Creating and Saving Forms:

CRTFRM - Figures 67a, 67c  
SAVFRM - Figures 114a-c  
REPFRM - Figures 66a,b  
MAKFRM - Figures 86a,b

Adding and Removing Fields:

CRTFLD - Figures 62a,b  
ADDFLD - Figures 60a-61b, 62c, 67b,c  
REPFLD - Figures 63a,c  
MVRFLD - Figures 64a,b  
RMVFLD - Figures 65  
GFMFLD - Figures 72a-e  
GDPFEX - Figures 70a-c  
GDPFLC - Figures 71

Changing Characteristics:

ADDDIM - Figures 73a,b	INQATT - Figures 93a-c
INQSIZ - Figures 102a-c	INQDIM - Figures 101a,b
INQDOM - Figures 95	INQVAL - Figures 104
INQLOC - Figures 97a,b	INQABS - Figures 92a-c
INQTYP - Figures 103a-c	INQPRO - Figures 99a-c

INQAPR - Figures 118,121,122	INQHLP - Figures 96a-c
RMVATT - Figures 105a-d	RMVDIM - Figures 75a,b
RMVDOM - Figures 108a,b	107a,b
RMVHLP - Figures 110a,b	RMVARY - Figures 111a,b
RMVVAL - Figures 113a-d	RMVPRO - Figures 100a,b
SETAPR - Figures 119,120	RMVAPR - Figures 123-126
SETDIM - Figures 83a,b	SETDOM - Figures 74a-e,
SETDIS - Figures 62c,d	76a-d
SETLOC - Figures 63b,c,	SETNAM - Figures 73a,b
81a-d	SETTYP - Figures 84a-c,
SETVAL - Figures 89a-91b	86a,b
SETSIZ - Figures 85a-d,	88a-d
87a-d	SETATT - Figures 78a,b
SETHLP - Figures 80a-f	SETPRO - Figures 77a-f,
	98c-e

#### Modifying the Display List:

ADDELM - Figures 7a-v  
ADDFRM - Figures 8a-d  
APRFLD - Figures 116a-d  
GETATT - Figures 22a,b  
GETBAK - Figures 6a,b  
GPAGE - Figures 11a,b  
GWINDO - Figures 12a,b  
PUTATT - Figures 23a,24b,27a-c  
PUTBAK - Figures 25a,b,28a,b  
RMVPAG - Figures 10a,b  
RPLFRM - Figures 9a,b

#### Transferring Data:

PDATA - Figures 16a,b, 18a,b  
GDATA - Figures 17a,b, 19a,b

#### Displaying Forms:

OUTSCR - Figures 31a-c  
OISCR - Figures 31a-c

#### Getting and Setting the Cursor Position:

GETCUR - Figures 29a,b  
PARFQN - Figures 30a,b  
PUTCUR - Figures 29a-c

#### Displaying Messages:

PMSGLC - Figures 34k  
PMSGLS - Figures 34n

#### Creating and Modifying Logical Devices:

CHGLDV - Figures 40a,b  
CLSLDV - Figures 54a,b  
GETLDV - Figures 36a,b  
INQLDV - Figures 35a,b  
MOVLDV - Figures 52a-c  
OPNLDV - Figures 39a,b

SETLDV - Figures 37a,b 38a,b

#### 4.1.2 User Profile Maintenance

GTUINF - Figures 3a,b

#### 4.1.3 Virtual Terminal Pass-through

GETVTI - Figures 4a,b  
INITVT - Figures 4a-6b  
PUTVTI - Figures 6a,b  
TERMVT - Figures 4a-6b

#### 4.2 Testing Methods and Constraints

The tests as outlined in Section 5 must be followed. The required input is stated for each test. This testing uses the normal mode of operation of these functions and does not completely exercise all the error combinations that a user of the Application Interface might create by faulty entry of parameter information. Much of this testing has been done, however, through the normal testing done by the developer of these functions. No data recording is required. It is suggested that on further running of this test, scripting of the test may be done and the output from running the script be saved for future testing. No additional constraints are placed on this unit test besides those listed in Section 3.3 of this unit test plan.

#### 4.3 Test Progression

The progression of testing of the Application Interface is fully outlined in Section 5 of this unit test plan. This progression should be followed exactly to insure the successful testing of this IISS configuration item.

#### 4.4 Test Evaluation

The test results are evaluated by comparing the information returned on the various output screens to that specified as successful for the given test. As outlined in Section 5, each test of Application Interface functionality provides an input screen with the required data entry specified and the resulting output for a successful test. To speed up this testing and provide more accurate measurement of the test's success, scripting has been used. The resulting output of these tests is saved in the files FPUTP.SAV and FPDFUTP.SAV. The corresponding test script files are FPUTP.SCP and FPDFUTP.SCP. All of these files are under IISS Configuration Management. If scripting is used, these files should be copied over to the test directory. The .SAV files may be used for future comparison against subsequent running of this unit test using scripting. To compare the results use the command file DIFFILE.COM which is under Configuration Management. The only differences should be the date/time stamps on the IISS Function Screen and the type of device on the window manager screen. The device type is given to the UIS by the NTM at run time. Note that the script files used to test the Application Interface are the same as two of



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the ones used to test the Form Processor. The latter part of the FPUTP.SCP script which tests window management processing is not necessary for the testing of the Application Interface.

## SECTION 5

### TEST PROCEDURES

#### 5.1 Test Description

The program ARTEST is used to perform this test. Commands are entered on the ARTEST form Command Line field. The commands are then translated by the program into a call to the appropriate Application Interface routine and the resulting output is observed on the ARTEST form.

#### 5.2 Test Control

As outlined, this unit test may be done manually or run automatically using a supplied script file. To manually perform this unit test requires the tester to be logged into the IISS system and enter ARTEST on the IISS Function Screen. In section 5.3 the required input data is specified for each function being tested and the resulting successful output is also specified. The order of the testing is also completely specified. The test control information is completely described by the sequence of the input and output screens presented in this section. The successfulness of the test may be determined by doing a comparison on the .SAV files produced against the ones provided under IISS Configuration Management.

#### 5.3 Test Procedures

To run the unit test plan as outlined in this section on a VAX, one must be logged on to an IISS account. The NTM must be up and running and the UI group logical names IISSFLIB and IISSMLIB must be set properly. IISSFLIB points to the directory containing production form definitions (FD files). IISSMLIB points to the directory containing error messages (MSG files).

This unit test uses the program ARTEST and its associated forms ffl through ff39. The FDL source file for these forms is presented in Appendix B. The executable for ARTEST should exist in the NTM environment directory and the NTM dirtbl.dat file should have its SD entry pointing to this directory. The NTM tables APITBL and APTTBL should have ARTEST set up as a normal IISS application program. This test uses the files PRINT.DEV, FPUTP.DAT, and DFTEST.DAT. DFTEST.DAT is under IISS Configuration Management and is needed for the script file FPDFUTP.SCP. The other two must be created in the NTM environment directory before beginning the test.

Assuming the NTM is up and running, an IISS user may start up this unit test plan as follows:

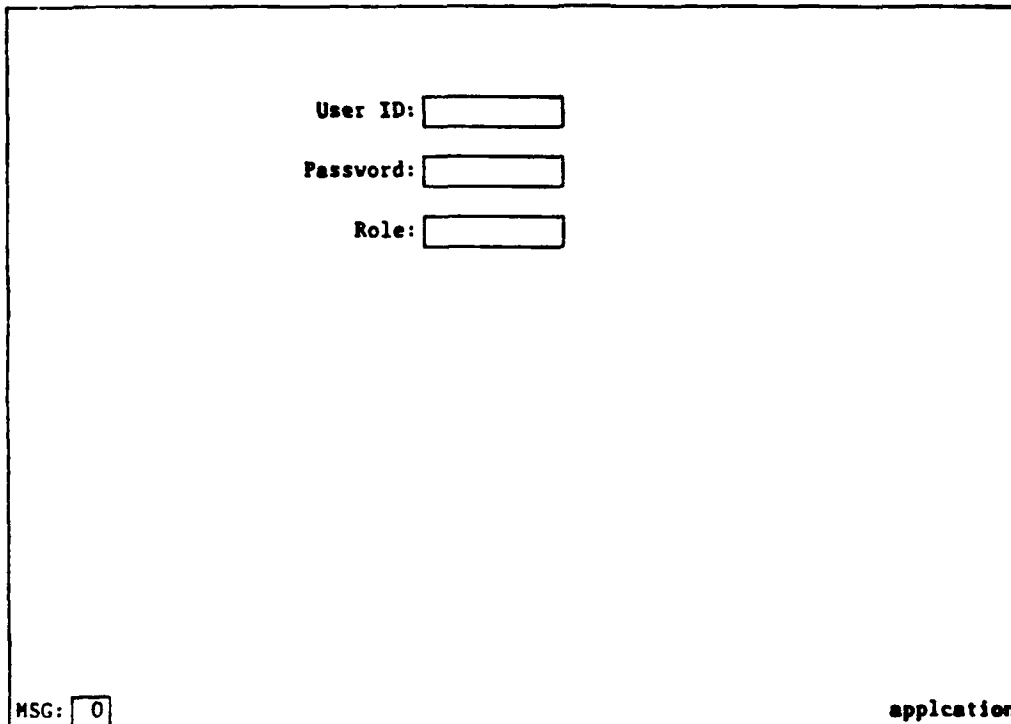
```
$ SET DEF <to directory containing your NTM environment>  
$ VT100 -RPUTP.SCP -SFPTST.SAV
```

This starts up the VT100 device driver with the first script as input and specifies a save file for output. If the User Interface system has been installed at your site with a

different device driver, then this step is amended as appropriate. The test begins executing on the terminal. When the \$ returns, run the second script by entering:

```
$ VT100 -RFPDFUTP.SCP -SFPDFTST.SAV
```

The results of the test are saved in the .SAV files. These files should be compared with the appropriate .SAV files under Configuration Management as described in section 4.4. The following figures show not only the form input and output but also the sequencing of the test. NOTE that the FPDFUTP.SCP file creates versions of FF1.FD and FF1.FDL in the NTM environment directory. These must be deleted before running any other tests using the ARTEST program or rerunning any portion of this test.



A screenshot of a logon screen. It features three input fields for 'User ID:', 'Passvord:', and 'Role:'. The 'Passvord:' label is misspelled. In the bottom left corner, there is a label 'MSG:' followed by a small box containing the number '0'. In the bottom right corner, the word 'application' is displayed.

User ID:

Passvord:

Role:

MSG:

application

Figure 5-1a Logon Screen

User ID:

Passvord:

Role:

MSG:

application

Figure 5-1b Enter User Information

IISS TEST BED VERSION 2.3			
Date: 11/30/87	Time: 12:56:10	User ID: MORENC	Role: <input type="text" value="MANAGER"/>
Function: <input type="text"/>	Device Type: <input type="text"/>	Device Name: <input type="text"/>	
MSG: <input type="text" value="0"/>		application	

Figure 5-1c IISS Function Screen

I I S S   T E S T   B E D   V E R S I O N   2.3			
Date: 11/30/87	Time: 12:56:10	User ID: MORENC	Role: <input type="text" value="MANAGER"/>
Function: <input type="text" value="artest"/>	Device Type: <input type="text"/>	Device Name: <input type="text"/>	
MSG: <input type="text" value="0"/>		application	

Figure 5-2a Start ARTEST Application

Command Line		form ff1			
<div></div>		<div></div>			
<div></div>		<div></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display:					
Line 22					
Line 23					
MSG:	0	application			

Figure 5-2b First ARTEST Screen



Command Line		gtuinf		form ff1		
<div></div>		<div></div>		<div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display:						
Line 22						
Line 23						
MSG:	0					application

Figure 5-3a Test GTUINF

Command Line		gtuinf		form ff1		
<div></div>		<div></div>		<div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: User Name = MORENC , User Role = MANAGER .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-3b GTUINF Result

Command Line	getvti	form ff1
<div></div>		<div></div>
<div></div>		
form ff2	form ff2	form ff3
<div></div>	<div></div>	<div></div>
form ff4	form ff8	form ff5
<div></div>	<div></div>	<div></div>
form ff4		form ff6
<div></div>		<div></div>
Line 21 Display: User Name = MORENC , User Role = MANAGER .....		
Line 22 .....		
Line 23 .....		
MSG: 0	application	

Figure 5-4a Test GETVTI

Command Line		getvti		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff7				<div></div>	
<div></div>				<div></div>	
Line 21 Display: User Name = MORENC , User Role = MANAGER .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-4b GETVTI Result

Command Line		getvti		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div>xx</div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff4				form ff7	
<div></div>				<div></div>	
Line 21 Display: User Name = MORENC , User Role = MANAGER .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-5a Enter Data for GETVTI

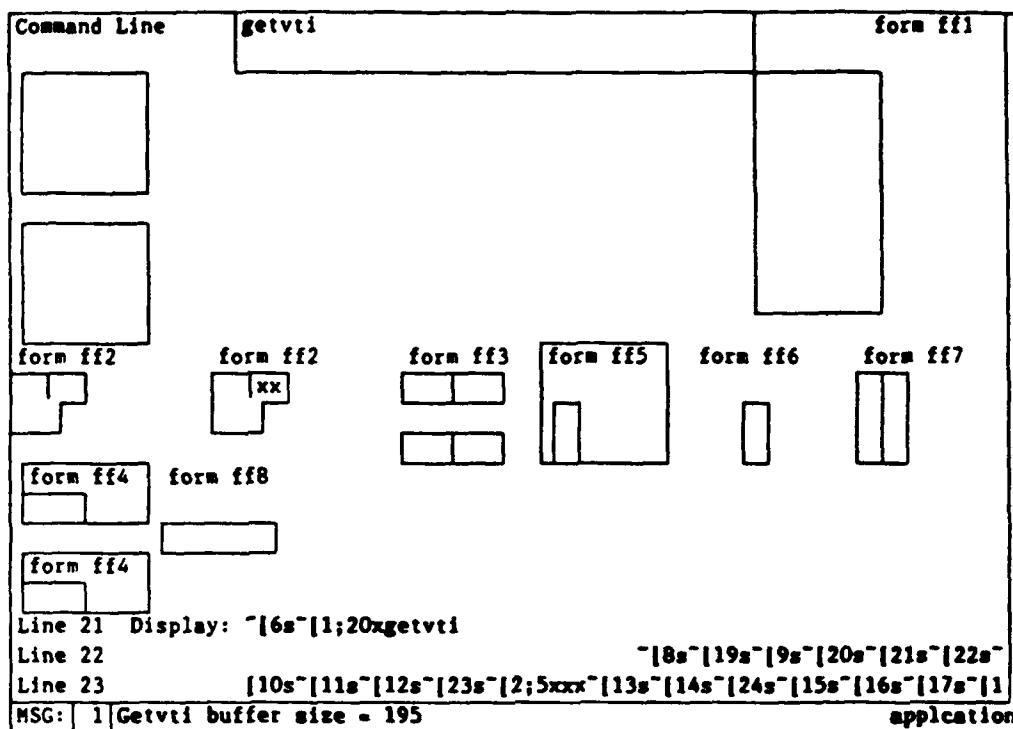


Figure 5-5b GETVTI Result

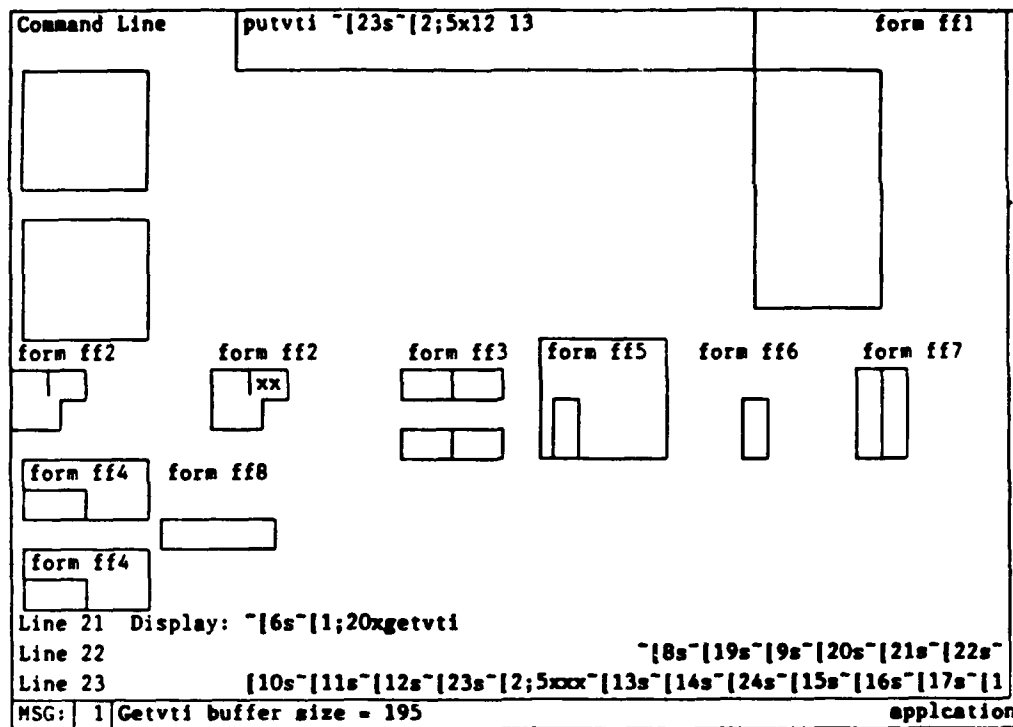


Figure 5-6a Test PUTVTI

Command Line		putvti ~[23s~[2;5x12 13		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px; text-align: center;">12</div>	<div style="border: 1px solid black; width: 30px; height: 10px;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px;"></div>	<div style="border: 1px solid black; width: 10px; height: 10px;"></div>	<div style="border: 1px solid black; width: 15px; height: 10px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: ~[6s~[1;20xgetvti					
Line 22 ~[8s~[19s~[9s~[20s~[21s~[22s~					
Line 23 [10s~[11s~[12s~[23s~[2;5xxx~[13s~[14s~[24s~[15s~[16s~[17s~[1					
MSG:	0	application			

Figure 5-6b PUTVTI Result



Command Line		addfrm v3 ff10		form ff1		
<div></div>		<div></div>		<div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-7a Add Fixed Size Form

Command Line		form ff1	
addfrm v3 ff10		Form ff10	
form ff2		form ff2	form ff3
form ff4		form ff8	form ff5
form ff4			form ff6
Line 21 Display: .....			form ff7
Line 22 .....			
Line 23 .....			
MSG: 0	application		

Figure 5-7b After Adding Fixed Size Form

Command Line		addelm ff10.11		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 30px; height: 15px;"></div>	<div style="border: 1px solid black; width: 30px; height: 15px; text-align: center;">12</div>	<div style="border: 1px solid black; width: 40px; height: 15px;"></div>	<div style="border: 1px solid black; width: 60px; height: 40px;"></div>	<div style="border: 1px solid black; width: 15px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 30px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 30px; height: 15px;"></div>	<div style="border: 1px solid black; width: 50px; height: 15px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 30px; height: 15px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7c Add First Element to Form ff10

Command Line		addelm ff10.11		form ff1	
<div></div> <div></div>		<div>Form ff10</div> <div></div>			
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div>12</div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: 1 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7d Form ff10 with One Element

Press <ENTER>

Command Line		addelm ff10.11		form ff1	
<div></div>				<div>Form ff10</div> <div></div> <div></div>	
<div></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: 2 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-7e Form ff10 with Two Elements

Press <ENTER>

Command Line	addelm ff10.11	form ff1
<div style="border: 1px solid black; width: 80px; height: 60px; margin: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 60px; margin: 5px;"></div>	<div style="border: 1px solid black; width: 80px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; font-size: 8px;">Form ff10</div> <div style="position: absolute; bottom: 5px; left: 5px; border-top: 1px solid black; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; bottom: 5px; left: 5px; border-top: 1px solid black; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; bottom: 5px; left: 5px; border-top: 1px solid black; border-bottom: 1px solid black; height: 20px;"></div> </div>	
form ff2	form ff2	form ff3
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px; text-align: center;">12</div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>
form ff4	form ff8	form ff5
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>
form ff4		form ff6
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>		<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; right: 5px; top: 5px; border: 1px solid black; width: 10px; height: 10px;"></div> </div>
Line 21 Display: 3 ..... Line 22 ..... Line 23 .....		
MSG: 0	application	

Figure 5-7f Form ff10 with Three Elements

Press <ENTER>

Command Line		addelm ff10.11		form ff1	
<div></div> <div></div>		Form ff10			
		<div></div>			
		<div></div>			
		<div></div>			
form ff2		form ff2		form ff3	
<div></div>		<div>12</div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff4				form ff7	
<div></div>				<div></div>	
Line 21 Display: 4 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-7g Form ff10 with Four Elements

Press <ENTER>

Command Li: addelm ff10.11 form ff1

Form ff10

form ff2 form ff2 form ff3 form ff5 form ff6 form ff7

form ff4 form ff8

form ff4

Line 21 Display: .....  
 Line 22 .....  
 Line 23 .....

MSG: 1 Adding an element would exceed bounds of form application

Figure 5-7h Form ff10 with Five Elements

Press <ENTER>



Command Line	rplfrm v3 0 ff11		form ff1		
<div></div>			<div>Form ff10</div> <div></div> <div></div> <div></div> <div></div> <div></div>		
<div>form ff2</div> <div></div>	<div>form ff2</div> <div>12</div>	<div>form ff3</div> <div></div> <div></div>	<div>form ff5</div> <div></div>	<div>form ff6</div> <div></div>	<div>form ff7</div> <div></div> <div></div>
<div>form ff4</div> <div></div>	<div>form ff8</div> <div></div>				
<div>form ff4</div> <div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	1	Adding an element would exceed bounds of form			application

Figure 5-7i Error on Fixed Size Form

Command Line		rplfrm v3 0 ffl1		form ffl	
<div></div>		<div></div>		<div>Form ffl1</div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div>12</div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7j Add Open-ended Form

Command Line		addelm ff11.11		form ff1	
				Form ff11	
form ff2		form ff2	form ff3	form ff5	form ff6
form ff4		form ff8			
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-7k After Adding Open-ended Form

Command Line		addelm ff11.11		form ff1	
<div></div>		<div></div>		<div>Form ff11</div> <div></div>	
<div></div>		<div></div>		<div></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: 1 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-71 Add First Element to Form ff11

Command Line		addelm ff11.11		form ff1	
<div></div>				<div>Form ff11</div> <div></div> <div></div>	
<div></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: 2 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7m Form ff11 with One Element

Press <ENTER>

Command Line		form ff1			
addelm ff11.11		Form ff11			
<div></div>		<div></div>			
<div></div>		<div></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: 3 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-7n Form ff11 with Two Elements

Press <ENTER>

Command Line		form ff1			
addelm ff11.11		Form ff11			
<div></div>		<div></div>			
<div></div>		<div></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div>12</div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: 4 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-7o Form ff11 with Three Elements

Press <ENTER>

The screenshot shows a terminal window with a command line at the top: "Command Line" followed by "addelm ff11.11" and "form ff1". Below the command line, there are several graphical forms labeled "form ff1" through "form ff7".

- form ff1**: A vertical stack of five rectangular boxes.
- form ff2**: A small rectangular box with a vertical line on the left side.
- form ff3**: A rectangular box divided into two vertical columns.
- form ff4**: A rectangular box with a vertical line on the left side.
- form ff5**: A rectangular box with a vertical line on the left side.
- form ff6**: A small rectangular box.
- form ff7**: A rectangular box divided into two vertical columns.

At the bottom of the terminal window, there is a status bar with the following text:

```
Line 21 Display: 5 .....
Line 22 .....
Line 23 .....
MSG: 0
```

The word "application" is visible in the bottom right corner of the terminal window.

Figure 5-7p Form ffl1 with Four Elements

Press <ENTER>



Command Line		form ff1			
addelm ff11.11		Form ff11			
		1			
		2			
		3			
		4			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
	12				
form ff4	form ff8				
form ff4					
Line 21 Display: 5 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7q Form ff11 with Five Elements

Press <ENTER>

Command Line		addelm ff11.11		form ff1							
<div></div> <div></div>		<div></div>		Form ff11							
				1							
				2							
				3							
		4									
form ff2		form ff2		form ff3		form ff5		form ff6		form ff7	
<div></div>		<div>12</div>		<div></div>		<div></div>		<div></div>		<div></div>	
form ff4		form ff8									
<div></div>		<div></div>									
form ff4											
<div></div>											
Line 21 Display: 5 .....											
Line 22 .....											
Line 23 .....											
MSG: 0		scr11/page									

Figure 5-7r Form ff11 with Six Elements

Command Line		addelm ff11.i1		form ff1	
<div>form ff2</div> <div>form ff2</div> <div>form ff3</div> <div>form ff5</div> <div>form ff6</div> <div>form ff7</div> <div>form ff4</div> <div>form ff8</div> <div>form ff4</div>				Form ff11	
				2	
				3	
				4	
Line 21 Display: 5 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrl1/page			

Figure 5-7s Add Data to Form ff11

Add data as shown and press <MODE> key to get into Scrl1/Page mode.

Command Line		addelm ff11.11		form ff1	
<div></div> <div></div>		Form ff11		2	
				3	
				4	
				5	
form ff2		form ff2		form ff3	
<div></div>		<div>12</div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: 5		.....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 0				scrl1/page	

Figure 5-7t Scrl1/Page Mode

Press PF5 <SCROLL UP>

Command Line		rplfrm screen 0 ff1		form ff1	
<div></div> <div></div>				Form ff11	
				2	
				3	
				4	
				5	
form ff2		form ff2		form ff3	
<div></div>		<div>12</div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: 5		.....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 0				application	

Figure 5-7u Form ff11 Showing Sixth Element

Command Line		form ff1			
<div></div>		<div></div>			
<div></div>		<div></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7v Add Data in Sixth Element

Add '6' as shown in Form ff11

Command Line		addfrm v3 ff5		form ff1		
<div></div>		<div></div>		<div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-7w Remove Form ff11

Press <MODE> key to return to application mode then enter screen as shown

Command Line		addfrm v3 ff5		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;">form ff5</div> <div style="border: 1px solid black; height: 40px; width: 20px; margin: 5px auto;"></div>	
form ff2		form ff2		form ff3	
<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 60px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 20px; height: 40px; display: inline-block;"></div>	
form ff4				form ff7	
<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>				<div style="border: 1px solid black; width: 20px; height: 40px; display: inline-block;"></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-7x New Screen



Command Line		addfrm w3 ff2		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;">form ff5</div> <div style="border: 1px solid black; height: 20px; width: 20px; margin: 5px auto;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 40px; height: 15px;"></div>	<div style="border: 1px solid black; width: 40px; height: 15px;"></div>	<div style="border: 1px solid black; width: 20px; height: 15px;"></div>	<div style="border: 1px solid black; width: 20px; height: 15px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 40px; height: 15px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0					application

Figure 5-8a Test ADDFRM

Command Line		addfrm v3 ff5		form ff1	
<div></div>		<div></div>		<div>form ff5</div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff4				form ff7	
<div></div>				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-8b Form ff5 in W3

Command Line		addfrm v3 ff2		form ff1	
<div></div>				<div>form ff5</div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-8c Add Another Form

Command Line		addfrm v3 ff2		form ff1	
<div></div>				<div>form ff2</div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-8d Form ff2 in W3

Command Line		rplfrm v3 2 ff3		form ff1	
<div></div>				<div>form ff2</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>	<div></div>	<div></div>			<div></div>
form ff4					
<div></div>	<div></div>				
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-9a Test RPLFRM

Command Line		rplfrm v3 2 ff3		form ff1	
<div></div>		<div></div>		<div>form ff3</div>	
				<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff7				<div></div>	
<div></div>				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-9b Form ff3 in W3

Command Line		rmvpag v3 2		form ff1	
<div></div>				<div>form ff3</div> <div></div> <div></div> <div></div>	
<div>form ff2</div> <div></div>		<div>form ff2</div> <div></div>		<div>form ff3</div> <div></div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff8</div> <div></div>		<div>form ff5</div> <div></div> <div></div>	
<div>form ff4</div> <div></div>				<div>form ff6</div> <div></div>	
<div>form ff4</div> <div></div>				<div>form ff7</div> <div></div> <div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-10a Test RMVPAG

Command Line		rmvpag v3 2		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG:	0	application				

Figure 5-10b W3 with Page Removed



Command Line		gpage v3 1		form ff1		
<div></div>		<div></div>		<div>form ff5</div> <div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG:	0					application

Figure 5-11a Test GPAGE

Command Line		gpage v3 1		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: FF5		.....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 0				application	

Figure 5-11b GPAGE Result

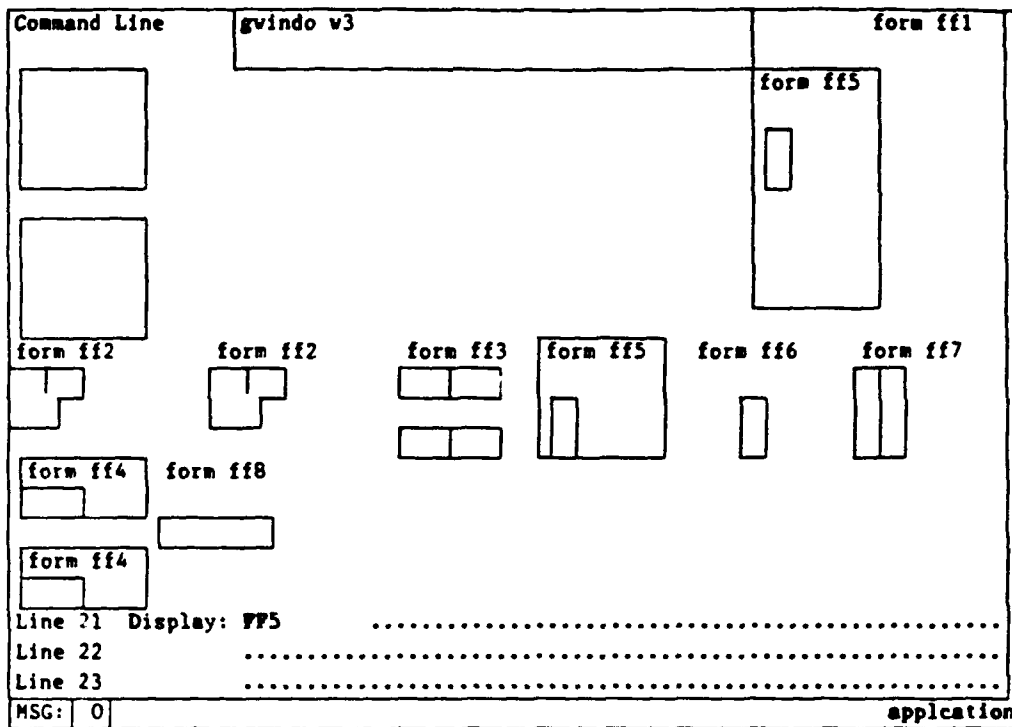


Figure 5-12a Test GWINDO

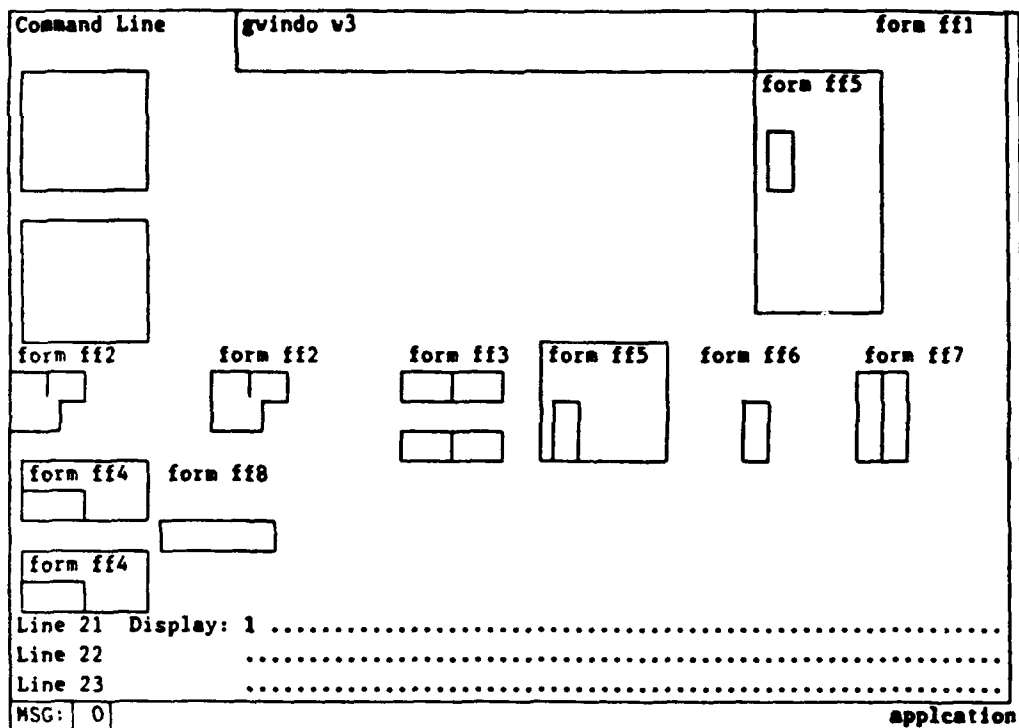


Figure 5-12b GWINDO Result

Command Line		addfrm v3 ff9		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;">form ff5</div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: 1 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-13a Add Form ff9

Command Line		addfrm v3 ff9		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>		<div style="border: 1px solid black; height: 100px; width: 100%;"></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	<div style="border: 1px solid black; width: 80px; height: 40px;"></div>	<div style="border: 1px solid black; width: 20px; height: 30px;"></div>	<div style="border: 1px solid black; width: 30px; height: 40px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-13b W3 with Form ff9

Command Line		rmvpag v3 2		form ff1	
<div></div>				<div>form ff9</div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 2		Requested function cannot be performed on this screen application			

Figure 5-14a Remove Page 2 of W3

Command Line		rmvpag v3 2		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-14b W3 with Page 2 Removed



Command Line	clsfrm ff9	form ff1
<div></div>		<div>form ff5</div> <div></div>
<div>form ff2</div> <div></div>	<div>form ff2</div> <div></div>	<div>form ff3</div> <div></div>
<div>form ff4</div> <div></div>	<div>form ff8</div> <div></div>	<div>form ff5</div> <div></div>
<div>form ff4</div> <div></div>		<div>form ff6</div> <div></div>
Line 21 Display: .....		<div>form ff7</div> <div></div>
Line 22 .....		
Line 23 .....		
MSG: 0		application

Figure 5-15a Test CLSFRM

Command Line		clsfrm ff9		form ff1	
<div></div>				<div>form ff5</div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: form was closed .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-15b CLSFRM Result

Press <ENTER>

Command Line		clsfrm ff9		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG:	1	Form is not open				application

Figure 5-15c Form ff9 Already Closed

Command Line		pdata ff6.11 HELLO		form ff1	
<div></div>		<div></div>		<div>form ff5</div> <div></div>	
<div>form ff2</div> <div></div>		<div>form ff2</div> <div></div>		<div>form ff3</div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff5</div> <div></div>		<div>form ff6</div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff8</div> <div></div>		<div>form ff7</div> <div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	1	Form is not open			application

Figure 5-16a Test PDATA

Command Line		pdata ff6.i1 HELLO		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;">form ff5</div> <div style="border: 1px solid black; height: 20px; width: 20px; margin: 5px auto;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-16b PDATA Result

Command Line		gdata 1 ff6.11		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>H</div> <div>E</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0						application

Figure 5-17a Test GDATA (Current Instance)

Command Line		gdata 1 ff6.11		form ff1	
<div style="border: 1px solid black; width: 100px; height: 100px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 100px; height: 100px;"></div>		<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px;">form ff5</div> <div style="position: absolute; top: 20px; left: 10px; width: 10px; height: 20px; background-color: black;"></div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 20px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 20px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>					
Line 21 Display: <b>BELL</b> .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-17b GDATA Result

Command Line		pdata ff6.11 BYE		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;">form ff5</div> <div style="border: 1px solid black; height: 20px; width: 20px; margin: 5px auto;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 30px; height: 15px;"></div>	<div style="border: 1px solid black; width: 30px; height: 30px;"></div>	<div style="border: 1px solid black; width: 10px; height: 20px; text-align: center;">H E</div>	<div style="border: 1px solid black; width: 15px; height: 30px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 30px; height: 15px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: <del>HELL</del> .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-18a PDATA 'BYE'



Command Line		pdata ff6.11 BYE		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>B</div>	<div></div>
<div></div>					<div>Y</div>	
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG:	0					application

Figure 5-18b PDATA Result

Command Line		gdata 0 ff6.i1		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>B Y</div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-19a Test GDATA (Previous Instance)

Command Line		form ff1			
<div></div>		<div>form ff5</div> <div></div>			
<div></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div>B</div>	<div></div>
<div></div>				<div>Y</div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: BYE .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-19b GDATA Result

Command Line		gdata 0 ff6.11		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: <b>BYE</b> .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-20a Change ff6 Value

Command Line		gdata 0 ff6.11		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
<div></div>					<div></div>
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: BYE .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-20b GDATA (Previous Instance)

Command Line		gdata 1 ff6.11		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: BYE .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-21a GDATA (Current Instance)

Command Line		gdata 1 ff6.i1		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>x</div> <div>x</div>	
				form ff7	
				<div></div>	
Line 21 Display: xxE .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-21b Current Value in Form ff6

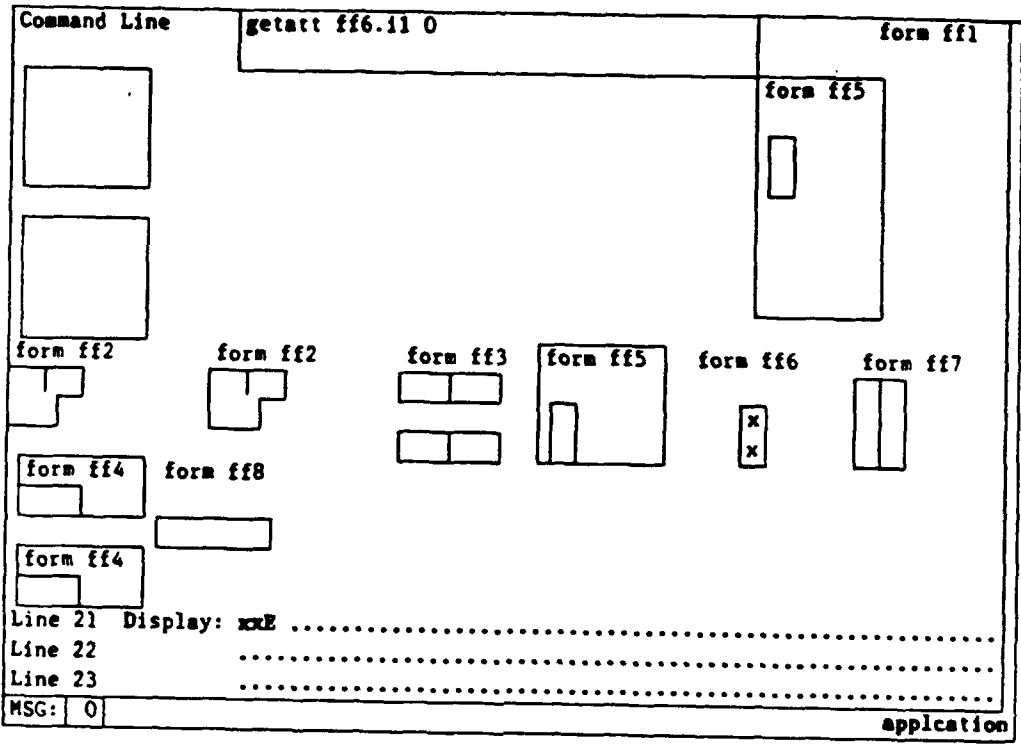


Figure 5-22a    Test GETATT



Command Line		getatt ff6.11 0		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: INPUT .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-22b GETATT Result

Command Line		putatt ff6.i1 0 output		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%; position: relative;"> <div style="position: absolute; top: 5px; left: 5px;">form ff5</div> <div style="position: absolute; top: 15px; left: 15px; width: 10px; height: 20px; border: 1px solid black;"></div> </div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 5px; height: 5px;"></div></div>	<div style="border: 1px solid black; width: 20px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 5px; height: 5px;"></div></div>	<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div><div style="position: absolute; bottom: 0; right: 0; width: 10px; height: 10px;"></div></div>	<div style="border: 1px solid black; width: 30px; height: 40px; position: relative;"><div style="position: absolute; top: 0; left: 5px; width: 5px; height: 30px;"></div></div>	<div style="border: 1px solid black; width: 10px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 5px; width: 5px; height: 10px;"></div><div style="position: absolute; top: 10px; left: 5px; width: 5px; height: 10px;"></div></div>	<div style="border: 1px solid black; width: 20px; height: 30px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div><div style="position: absolute; bottom: 0; right: 0; width: 10px; height: 10px;"></div></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 15px;"></div>	<div style="border: 1px solid black; width: 40px; height: 15px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 15px;"></div>					
Line 21 Display: INPUT .....					
Line 22 .....					
Line 23 .....					
MSG: 0					application

Figure 5-23a Test PUTATT (OUTPUT)

Command Line		putatt ff6.i1 0 output		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	x
					x
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-23b PUTATT Result

Command Line		putatt ff6.11 0 text		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	x
					x
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-24a Test PUTATT (TEXT)

Command Line		putatt ff6.11 0 text		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%; position: relative;"> <div style="position: absolute; top: 10px; left: 10px; width: 20px; height: 20px; border: 1px solid black;"></div> </div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> <div style="position: absolute; bottom: 0; right: 0; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 40px; position: relative;"> <div style="position: absolute; top: 10px; left: 10px; width: 10px; height: 20px;"></div> </div>	x x	<div style="border: 1px solid black; width: 20px; height: 40px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> </div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> </div>	<div style="border: 1px solid black; width: 50px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px;"></div> </div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-24b PUTATT Result

Command Line		putbak ff6 0 white		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	x	<div></div>
<div></div>					x	
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0						application

Figure 5-25a Test PUTBAK (WHITE)

Command Line		putbak ff6 0 white		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-25b PUTBAK Result

Command Line		getbak ff6 0		form ff1		
				form ff5		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
					x	
					x	
form ff4		form ff8				
form ff4						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG:	0	application				

Figure 5-26a Test GETBAK



Command Line		getbak ff6 0		form ff1	
				form ff5	
form ff2		form ff2	form ff3	form ff5	form ff6
					x
					x
form ff4		form ff8			
form ff4					
Line 21 Display: WHITE.....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-26b GETBAK Result

Command Line		tapatt ff5.i1 1 output		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: WHITE.....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-27a Change Attribute

Command Line		tupatt ff5.i1 1 output		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: OUTPUT .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-27b Attribute Changed

Press PF16.

Command Line		tapatt ff5.i1 1 output		form ff1		
<div></div>		<div></div>		<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: type = 1, row = 1, col = 10, fqn = .PSCREEN.SCREEN<2>.FF1.I4;						
Line 22						
Line 23						
MSG: 0		application				

Figure 5-27c Background Attribute Restored

Command Line		tmpbak ff5 0 black		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: type = I, row = 1, col = 10, fqn = .PSCREEN.SCREEN<2>.PF1.I4;					
Line 22					
Line 23					
MSG: 0		application			

Figure 5-28a Change Form ff5 Background

Command Line		tupbak ff5 0 black		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: BLACK.....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-28b Form ff5 Background Black

Command Line		putcur ff5		form ff1	
<div style="border: 1px solid black; width: 100px; height: 100px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 100px; height: 100px;"></div>				<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; left: 5px;">form ff5</div> <div style="position: absolute; top: 20px; left: 20px; width: 10px; height: 20px; background-color: black;"></div> </div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: black;"></div></div>					
Line 21 Display: BLACK.....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-29a Test PUTCUR

Command Line		putcur ff5		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: BLACK.....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-29b PUTCUR Result

Press PF16.



Command Line

putcur ff5

form ff1

form ff5

form ff2

form ff2

form ff3

form ff5

form ff6

form ff7

form ff4

form ff8

form ff4

Line 21 Display: type = F, row = 1, col = 1, fqn = .PSCREEN.SCREEN<2>.FF1.FF5;

Line 22

Line 23

MSG: 0

application

Figure 5-29c Current Cursor Position

Command Line		parfqn 2		form ff1		
<div></div>				<div>form ff3</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: type = P, row = 1, col = 1, fqn = .PSCREEN.SCREEN<2>.FF1.FF5;						
Line 22						
Line 23						
MSG: 0		application				

Figure 5-30a Test PARFQN

Command Line		parfqn 2		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: type = V, level = 2, f_name = SCREEN<2>						
Line 22						
Line 23						
MSG: 0		application				

Figure 5-30b PARFQN Result

Command Line		oiscr v3		form ff1	
<div></div>		<div></div>		<div>form ff5</div> <div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>x</div> <div>x</div>	
				form ff7	
				<div></div>	
Line 21 Display: type = V, level = 2, f_name = SCREEN<2>					
Line 22					
Line 23					
MSG: 0		application			

Figure 5-31a Test Terminal in Terminal

Command Line		oiscr w3		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: type = V, level = 2, f_nam = SCREEN<2>						
Line 22						
Line 23						
MSG: 0						application

Figure 5-31b Test Screen

May only tab to items in Form ff5 and the MSG item.  
Press <ENTER>.

Command Line		oiscr v3		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>x</div> <div>x</div>	
				form ff7	
				<div></div>	
Line 21 Display: 0 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-31c Normal Screen

Command Line		setdqn ff2(1).i1		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>x</div> <div>x</div>	
				form ff7	
				<div></div>	
Line 21 Display: 0 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-32a Test SETDQN

Command Line		getdqn		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div>x</div> <div>x</div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-32b Test GETDQN



Command Line		getdqn		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>		<div style="border: 1px solid black; padding: 5px;"> <div style="border: 1px solid black; height: 20px; width: 20px; margin: 0 auto;"></div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; text-align: center;">x x</div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: .PSCREEN.SCREEN<2>.FP1.FF2(1).I1;.....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-32c GETDQN Result

Command Line		pdata i1 123456		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .PSCREEN.SCREEN<2>.FF1.FF2(1).I1;.....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-32d Enter Data

Command Line		pdata il 123456		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-32e Data Entered

Command Line		setdqn .pscren		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-32f Reset Default Qualified Name

Command Line		pdata i1 123456		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-32g Enter Data

Command Line		pdata il 123456		form ff1		
<div></div>				<div>form ff5</div> <div></div>		
<div></div>						
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
12 34		<div></div>	<div></div>	<div></div>	<div>x</div> <div>x</div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 1		Path not unique				application

Figure 5-32h Path Not Unique

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
				form ff5	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
12 34				x x	
form ff4	form ff8				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1 Path not unique		application			

Figure 5-33a Enter Test Data

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
				form ff5	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
12 34				x x	A B E F I J
form ff4	form ff8				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-33b Test Data Entered

Press <MODE> key to get into Scrl1/Page mode



Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ffi	
<div></div>				<div></div>		<div>form ff5</div> <div></div>	
<div>form ff2</div> <div>12 34</div>		<div>form ff2</div> <div></div>		<div>form ff3</div> <div></div>		<div>form ff5</div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff8</div> <div></div>		<div>form ff6</div> <div>x</div> <div>x</div>		<div>form ff7</div> <div>A B</div> <div>E F</div> <div>I J</div>	
<div>form ff4</div> <div></div>							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl/page					

Figure 5-34a Scroll Up

Position cursor on 'A' in form ff7.  
Press PF5 <SCROLL UP>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div></div>						<div>form ff5</div> <div></div>	
<div></div>							
form ff2		form ff2		form ff3		form ff5	
12 34		<div></div>		<div></div>		<div></div>	
form ff4		form ff8				form ff6	
<div></div>		<div></div>				<div>x</div>	
form ff4						<div>x</div>	
<div></div>						form ff7	
						<div>E F</div>	
						<div>I J</div>	
						<div>M N</div>	
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl/page					

Figure 5-34b Scroll Up Result

Press PF6 <SCROLL DOWN>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
form ff2		form ff2		form ff3		form ff5	
12 34						<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
form ff4		form ff8				form ff6	
						<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
form ff4						form ff7	
						<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl/page					

Figure 5-34c Scroll Down Result

Press PF7 <SCROLL LEFT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
						form ff5	
form ff2		form ff2		form ff3		form ff5	
12 34							
form ff4		form ff8		form ff6		form ff7	
				x		B C	
				x		F G	
						J K	
form ff4							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl1/page					

Figure 5-34d Scroll Left Result

Press PF8 <SCROLL RIGHT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34					x
					x
form ff4		form ff8			form ff7
					A B
					E F
					I J
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrl/page			

Figure 5-34e Scroll Right Result

Press PF9 <PAGE UP>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div></div>						<div>form ff5</div> <div></div>	
<div></div>							
form ff2		form ff2		form ff3		form ff5	
12 34		<div></div>		<div></div>		<div></div>	
<div></div>							
form ff4		form ff8		form ff6		form ff7	
<div></div>		<div></div>		<div>x</div>		<div>MN</div>	
<div></div>				<div>x</div>		<div>QR</div>	
form ff4						<div>UV</div>	
<div></div>							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrll/page					

Figure 5-34f Page Up Result

Press PF10 <PAGE DOWN>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div></div>						<div>form ff5</div> <div></div>	
<div></div>							
form ff2		form ff2		form ff3		form ff5	
12 34		<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>		<div></div>	
form ff4		form ff8				form ff6	
<div></div>		<div></div>				x	
<div></div>						x	
form ff4						form ff7	
<div></div>						A B	
						E F	
						I J	
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl1/page					

Figure 5-34g Page Down Result

Press PF11 <PAGE LEFT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1					
<div></div>		<div>form ff5</div> <div></div>									
<div></div>											
form ff2		form ff2		form ff3		form ff5		form ff6		form ff7	
12 34		<div></div>		<div></div>		<div></div>		<div>x</div> <div>x</div>		<div>C D</div> <div>G H</div> <div>K L</div>	
form ff4		form ff8									
<div></div>		<div></div>									
form ff4											
<div></div>											
Line 21 Display: .....											
Line 22 .....											
Line 23 .....											
MSG: 0		scrll/page									

Figure 5-34h Page Left Result

Press PF12 <PAGE RIGHT>.



Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
				form ff5	
form ff2		form ff2		form ff3	
12 34					
form ff4		form ff8		form ff5	
				form ff6	
				x	
				x	
form ff4				form ff7	
				A B	
				E F	
				I J	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scr11/page			

Figure 5-34i Page Right Result

Press PF11 <PAGE LEFT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34					x
					x
form ff4		form ff8			C D
					G H
form ff4					K L
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrll/page			

Figure 5-34j Test PMSGLC

Press PF11 <PAGE LEFT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
12 34		<div></div>	<div></div>	<div></div>	<div>x</div>
form ff4		form ff8			<div>C D</div>
<div></div>		<div></div>			<div>G H</div>
form ff4					<div>K L</div>
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		End of scrolling section reached			
		scrll/page			

Figure 5-34k PMSGLC Result

Press PF12 <PAGE RIGHT>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div></div>						<div>form ff5</div> <div></div>	
<div></div>							
form ff2		form ff2		form ff3		form ff5	
12/34		I					
form ff4		form ff8		form ff6		form ff7	
				x		A B	
				x		E F	
form ff4						I J	
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrl/page					

Figure 5-341 Page Up

Press PF9 <PAGE UP>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div></div>						<div>form ff5</div> <div></div>	
<div></div>							
form ff2		form ff2		form ff3		form ff5	
12 34		<div></div>		<div></div>		<div></div>	
<div></div>							
form ff4		form ff8		form ff6		form ff7	
<div></div>		<div></div>		<div>x</div>		<div>M N</div>	
<div></div>				<div>x</div>		<div>Q R</div>	
form ff4						<div>U V</div>	
<div></div>							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 0		scrll/page					

Figure 5-34m Test PMSGLS

Press PF9 <PAGE UP>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ				form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		<div style="border: 1px solid black; height: 100px; width: 100%; position: relative;"> <div style="position: absolute; top: 5px; right: 5px;">form ff5</div> <div style="position: absolute; top: 15px; left: 15px; width: 10px; height: 20px; background-color: black;"></div> </div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7		
12 34				x	M N		
				x	O R		
					U V		
form ff4	form ff8						
form ff4							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 1	End of scrolling section reached					scrl1/page	

Figure 5-34n PMSGSL Result

Press PF10 <PAGE DOWN>.

Command Line		pdata ff7 ABCDEFGHIJKLMNOPQRSTUVWXYZ		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div>form ff2</div> <div>12 34</div>		<div>form ff2</div> <div></div>		<div>form ff3</div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff5</div> <div></div>		<div>form ff6</div> <div>x</div> <div>x</div>	
<div>form ff4</div> <div></div>		<div>form ff8</div> <div></div>		<div>form ff7</div> <div>A B</div> <div>E F</div> <div>I J</div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrl1/page			

Figure 5-34o Scrolling Ended

Command Line		inqldv		form ff1	
<div></div>				<div>form ff5</div> <div></div>	
<div>form ff2</div> <div>12 34</div>		<div>form ff2</div> <div></div>		<div>form ff3</div> <div></div>	
<div>form ff4</div> <div></div>		<div>form ff5</div> <div></div>		<div>form ff6</div> <div>x</div> <div>x</div>	
<div>form ff4</div> <div></div>		<div>form ff8</div> <div></div>		<div>form ff7</div> <div>A B</div> <div>E F</div> <div>I J</div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrll/page			

Figure 5-35a Test INQLDV



Command Line		inqldv		form ff1							
<div style="border: 1px solid black; width: 60px; height: 40px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div>		<div style="border: 1px solid black; width: 60px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px;">form ff5</div> <div style="position: absolute; top: 20px; left: 10px; width: 10px; height: 20px; background-color: black;"></div> </div>									
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7						
12 34	<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 40px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 40px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px; background-color: black;"></div></div>	<table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>A</td><td>B</td></tr> <tr><td>E</td><td>F</td></tr> <tr><td>I</td><td>J</td></tr> </table>	A	B	E	F	I	J
A	B										
E	F										
I	J										
form ff4	form ff8										
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>										
form ff4											
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>											
Line 21 Display: logical device number = 5 .....											
Line 22 .....											
Line 23 .....											
MSG: 0		scrll/page									

Figure 5-35b INQLDV Result

Logical device numbers are determined at run time. Substitute the number you get (if it's not '5') wherever '5' appears in the remainder of this test.

Command Line		getldv 5		form ff1		
<div></div>		<div></div>		<div>form ff5</div> <div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
12 34		<div></div>	<div></div>	<div></div>	<div>x</div>	<div>A B</div>
<div></div>		<div></div>	<div></div>	<div></div>	<div>x</div>	<div>E F</div>
form ff4		form ff8				<div>I J</div>
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: logical device number = 5 .....						
Line 22 .....						
Line 23 .....						
MSG:	0					scrll/page

Figure 5-36a Test GETLDV

Command Line		getldv 5		form ff1	
				form ff5	
form ff2		form ff2	form ff3	form ff5	form ff6
12 34					x
					x
form ff4		form ff8			form ff7
					A B
					E F
					I J
Line 21 Display: Logical Device 5: Row = 1, Col = 1, Width = 80 Depth = 23					
Line 22					
Line 23					
MSG: 0		scr11/page			

Figure 5-36b GETLDV Result

Command Line	setldv 5 3 3 50 15	form ff1
<div style="border: 1px solid black; width: 80px; height: 50px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 80px; height: 50px;"></div>	<div style="border: 1px solid black; width: 80px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; font-size: 8px;">form ff5</div> <div style="position: absolute; top: 50px; left: 50px; width: 10px; height: 20px; background-color: black;"></div> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; margin-bottom: 5px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff2</span> <span>form ff2</span> </div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>12</span> <span>34</span> </div> <div style="border: 1px solid black; width: 40px; height: 20px; margin-top: 5px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff4</span> <span>form ff8</span> </div> <div style="border: 1px solid black; width: 40px; height: 20px; margin-top: 5px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff4</span> <span></span> </div>
<div style="border: 1px solid black; width: 40px; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff2</span> <span>form ff2</span> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff3</span> <span>form ff3</span> </div>	<div style="border: 1px solid black; width: 40px; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff5</span> <span>form ff6</span> </div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>form ff7</span> <span>form ff7</span> </div>
<div style="border: 1px solid black; width: 100%; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>Line 21 Display: Logical Device 5: Row = 1, Col = 1, Width = 80 Depth = 23</span> </div> <div style="border: 1px solid black; width: 100%; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>Line 22</span> </div> <div style="border: 1px solid black; width: 100%; height: 20px; display: flex; justify-content: space-between; font-size: 8px;"> <span>Line 23</span> </div>		
MSG:	0	scrll/page

Figure 5-37a Test SETLDV (Smaller)

I I S S   T E S T   B E D   V E R S I O N   2.3			
Command Line		setldv 5 3 3 50 15	ENC
		Role: <input type="text" value="MANAGER"/>	
		Device Name: <input type="text"/>	
<div></div>			
<div></div>			
form ff2	form ff2	form ff3	form ff
12 34	<div></div>	<div></div>	<div></div>
MSG: <input type="text" value="0"/>		scrll/page	

Figure 5-37b SETLDV Result

I I S S   T E S T   B E D   V E R S I O N   2.3

---

Command Line    setldv 5 1 1 80 23    ENC    Role:

Device Name:

form ff2    form ff2    form ff3    form ff

12 | 34             

MSG:     scrll/page

Figure 5-38a Test SETLDV (Larger)

Command Line		setldv 5 1 1 80 23		form ff1	
<div style="border: 1px solid black; width: 80px; height: 50px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 50px;"></div>		<div style="border: 1px solid black; width: 80px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px;">form ff5</div> <div style="position: absolute; top: 50px; left: 50px; width: 10px; height: 20px; background-color: black;"></div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
12 34	<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 10px; height: 10px; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 10px; height: 20px; background-color: black;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px; text-align: center;">x</div> <div style="border: 1px solid black; width: 40px; height: 20px; text-align: center;">x</div>	<div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">A B</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">E F</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">I J</div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	scrll/page			

Figure 5-38b SETLDV Result

Command Line		opnldv		form ff1	
<div></div>		<div></div>		<div>form ff5</div> <div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
12 34					x
					x
form ff4		form ff8			A B
					E F
form ff4					I J
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		scrll/page			

Figure 5-39a Test OPNLDV



Command Line		form ff1			
<div></div>		<div></div>			
<div></div>		<div></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: Opened and changed to logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	scrll/page			

Figure 5-39b OPNLDV Result

Logical device numbers are determined at run time. Substitute the number you get (if it's not '23') wherever '23' appears in the remainder of this test.

Command Line		chgl dv 5		form ff1	
<div style="border: 1px solid black; width: 100px; height: 100px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 100px; height: 100px;"></div>		<div style="border: 1px solid black; width: 100px; height: 100px;"></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	<div style="border: 1px solid black; width: 80px; height: 40px;"></div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>	<div style="border: 1px solid black; width: 30px; height: 40px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: Opened and changed to logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	scrll/page			

Figure 5-40a Test CHGLDV

Command Line		chgl dv 5		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21		Display: Opened and changed to logical device: 26 .....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 0				scrll/page	

Figure 5-40b CHGLDV Result

All fields non-enterable.

Press <MODE> key to get into window manager mode.

Command Line		chgldv 5		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21		Display: Opened and changed to logical device: 26 .....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 0				window mgr	

Figure 5-41a Select Application

Press PF14 <SELECT AP>.

Command Line		chgldv 5		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: Opened and changed to logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Window is selected			
window mgr					

Figure 5-41b Application Selected (LDV 5)

Command Line		chgl dv 5		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: Opened and changed to logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Window is selected			window mgr

Figure 5-42a Test Size Key

Position cursor above 'm' in 'form ff3' then press PF9 <SIZE>.

Command Line		chgldv 5		form ff1	
<div></div> <div></div>		<div>form ff5</div> <div></div>			
form ff2		form ff2		form ff3	
12 34					
form ff4		form ff8		form ff5	
				form ff6	
form ff4				x	
				x	
				form ff7	
				A B	
				E F	
				I J	
Line 21 Display: Changed to logical device: 5 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-42b Size Result

Command Line		chgl dv 5		form ff1	
<div style="border: 1px solid black; width: 60px; height: 40px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div>				<div style="border: 1px solid black; width: 60px; height: 80px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px;">form ff5</div> <div style="position: absolute; left: 10px; top: 15px; width: 10px; height: 20px; background-color: black;"></div> </div>	
form ff2		form ff2		form ff3	
12 34		<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; right: 5px; top: 5px; width: 10px; height: 10px; background-color: black;"></div></div>		<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; left: 5px; top: 5px; width: 10px; height: 10px; background-color: black;"></div></div>	
				<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; left: 5px; top: 5px; width: 10px; height: 10px; background-color: black;"></div></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 30px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; left: 10px; top: 10px;">x</div><div style="position: absolute; left: 10px; top: 15px;">x</div></div>	
form ff4					
<div style="border: 1px solid black; width: 30px; height: 20px;"></div>					
Line 21 Display: Changed to logical device: 5 .....					
Line 22 .....					
Line 23 .....					
MSG:	0	window mgr			

Figure 5-43a Test Location Key

Position cursor as shown and press PF10 <LOCATION>.



Command Line		opnldv		form ff1	
				form ff5	
		Command Line			
		chgl dv 5			
form ff2		f		form ff6	
12 34				x	
				x	
form ff4		form		form ff7	
				A B	
				E F	
				I J	
form ff4					
Line 21 Display: Changed to logical device: 5 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		windov mgr			

Figure 5-43b Location Result

Command Line		addfrm v3 ff1		form ff1	
				form ff5	
		Command Line		chgldv 5	
form ff2		f		form ff6	
				x	
form ff4		form		x	
				form ff7	
form ff4				v 3	
				E F	
				I J	
Line 21 Display: Changed to logical device: 5 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-44a Add Form ff1

Command Line		addfrm v3 ff1		form ff1	
				Command L	
Command Line		chgldv 5			
form ff2		f			
form ff4		form		form ff6	
				x	
				x	
form ff4				form ff7	
				v 3	
				E F	
				I J	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-44b Form ff1 Added

Command Line		addfrm v3 ff1		form ff1	
		Command L			
Command Line		chgldv 5			
form ff2		f		form ff6	
				form ff7	
form ff4		form		x x	
				v 3 E F I J	
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-45a Test Selected Window

Position cursor on 'C' in 'Command L' below form ff1 and press PF11 <SELECT WINDOW>.

Command Line		addfrm v3 ff1		form ff1	
				Command L	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
				form ff7	
				v 3	
				E F	
				I J	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Window is selected			window mgr

Figure 5-45b Select Window Result

Command Line		addfrm w3 ff1		form ff1	
<div></div>		<div></div>		Command L	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....				form ff7	
Line 22 .....				<div></div>	
Line 23 .....					
MSG: 1 Window is selected				window mgr	

Figure 5-46a Test Page Up

Position cursor as shown and press PF5 <PAGE UP>.

Command Line		addrfrm v3 ff1		form ff1	
<div></div>				<div></div>	
<div></div>				<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			
<div></div>	<div></div>	<div></div>			
form ff4					
<div></div>	<div></div>				
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-46b Page Up Result

Command Line		addfrm v3 ff1		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff2	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff7	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....		form ff5		form ff6	
Line 22 .....		<div></div>		<div></div>	
Line 23 .....		<div></div>		<div></div>	
MSG: 0				window mgr	

Figure 5-47a Test Page Down

Position cursor as shown and press PF6 <PAGE DOWN>.



Command Line		addfrm v3 ff1		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff2	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4				form ff5	
<div></div>				<div></div>	
				form ff6	
				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-47b Page Down Result

Press PF15 <HOME VIEW>.

Command Line		addfrm v3 ff1		form ff1	
<div></div>				Command L	
<div></div>				<div></div>	
<div></div>				<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....				form ff7	
Line 22 .....				<div></div>	
Line 23 .....					
MSG: 0				window mgr	

Figure 5-47c Home View Result

Command Line		addfrm v3 ff1		form ff1	
				Command L	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
				x	
				x	
				form ff7	
				v 3	
				E F	
				I J	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-48a Test Page Left

Position cursor on 'L' in 'Command L' below form ff1 and press PF7 <PAGE LEFT>.

Command Line		addfrm v3 ff1		form ff1	
		Line			
		!			
		□			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
□	□	□ □	□	x	v 3
□	□	□ □	□	x	E F
form ff4	form ff8				
□	□				
form ff4					
□					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	window mgr			

Figure 5-48b Page Left Result

Command Line		addfrm v3 ff1		form ff1	
				Line	
				!	
				□	
form ff2		form ff2		form ff3	
form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6	
form ff4		form ff8		form ff7	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				window mgr	

Figure 5-49a Test Page Right

Position cursor on 'L' in 'Line' below form ff1 and press PF8  
<PAGE RIGHT>.

Command Line		addfrm v3 ff1		form ff1	
		Command L			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
				x x	v 3 E F I J
form ff4	form ff8				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	window mgr			

Figure 5-49b Page Right Result

Press PF12 <UNSELECT WINDOW>.

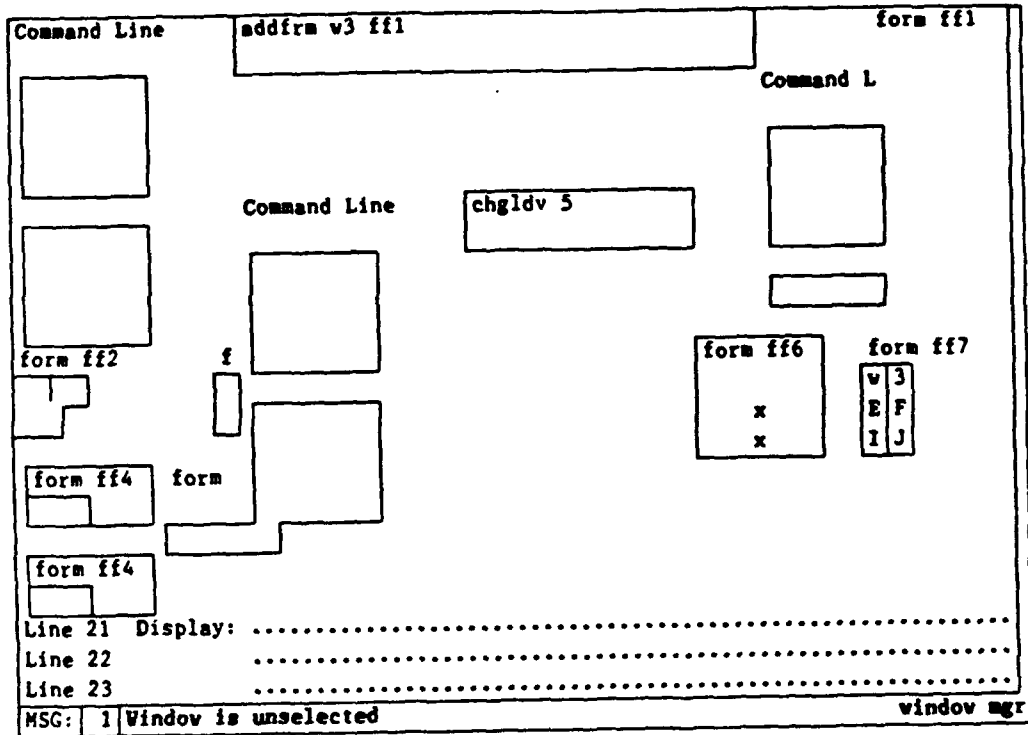


Figure 5-49c Unselect Window Result

Press <MODE> key to get into status mode.

Command Line		addfrm v3 ff1		form ff1	
				Command L	
Command Line		chgl dv 5			
form ff2		f		form ff6	
				x	
				x	
form ff4		form		form ff7	
				v 3	
				E F	
				I J	
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1 Window is unselected status					

Figure 5-50a Test APSTAT

Press PF6 (APSTAT) to display Application Status Form.



Application Status										
Application	Device		Pri	Window Name	Location		Display Size		Viewport Offset	
	Type	Name			Row	Col	V	D	Row	Col
SDARTESTZZ	VT100	TT:	1		7	19	36	11	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				VNF	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	2		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				VNF	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
SDARTESTZZ				VNF	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
MENU	VT100	TT:	3		1	1	80	23	0	0

MSG: 0 status

Figure 5-50b Application Status Form

The Device Type field value may be different than shown in this figure. This value is assigned by the NTM at run time.

Application Status										
Device				Window Name	Location		Display Size		Viewport Offset	
Application	Type	Name	Pri		Row	Col	V	D	Row	Col
SDARTESTZZ	SDPRINTERZ	PRINT.DEV	1		7	19	36	11	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	2		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
MENU	VT100	TT:	3		1	1	80	23	0	0

MSG: 0 status

Figure 5-50c Manually Test Move LDV

Change form as shown and press <ENTER>. NOTE: 'SDPRINTERZ' and 'PRINT.DEV' must be entered in the upper case for this release.

Command Line		addfrm v3 ff1		form ff1	
		Command L			
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		form ff6			
form ff4		form ff7			
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		status			

Figure 5-50d Move LDV Result

Press PF6 (APSTAT) to display Application Status Form.

Application Status										
Application	Device			Window Name	Location		Display Size		Viewport Offset	
	Type	Name	Pri		Row	Col	W	D	Row	Col
SDARTESTZZ	SDPRINTERZ	PRINT.DEV			7	19	36	11	0	0
SDARTESTZZ				SCREEN	1	1	79	24	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	1		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
MENU	VT100	TT:	2		1	1	80	23	0	0

MSG: 0 status

Figure 5-51a Application Status Form

Application Status										
Device				Window Name	Location		Display Size		Viewport Offset	
Application	Type	Name	Pri		Row	Col	W	D	Row	Col
SDARTESTZZ			1		7	19	36	11	0	0
SDARTESTZZ				SCREEN	1	1	79	24	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	2		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
MENU	VT100	TT:	3		1	1	80	23	0	0
MSG: 0 status										

Figure 5-51b Return LDV

Change form as shown and press <ENTER>.

Command Line		addfrm v3 ff1		form ff1							
		Command L									
Command Line		chgl dv 5									
form ff2		f		form ff6							
form ff4		form		form ff7							
form ff4				<table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>v</td><td>3</td></tr> <tr><td>E</td><td>F</td></tr> <tr><td>I</td><td>J</td></tr> </table>		v	3	E	F	I	J
v	3										
E	F										
I	J										
Line 21 Display: ..... Line 22 ..... Line 23 .....											
MSG: 0		status									

Figure 5-51c Return LDV Result

Command Line		MOVLDV 26 FPUTP.DAT SDPRINTER2		form ff1	
				Command L	
		Command Line		chgldv 5	
form ff2		f		form ff6	
				x	
				x	
form ff4		form		form ff7	
				v 3	
				E F	
				I J	
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		status			

Figure 5-52a Test MOVLDV

Enter MOVLDV information in upper case.

Command Line		MOVLDV 26 FPUTP.DAT SDPRINTERZ		form ffi	
		Command L			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
				x	v 3 E F I J
form ff4	form ff8			x	
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0					status

Figure 5-52b MOVLDV Result

Press PF6 (APSTAT) to display Application Status Form.



Application Status											
		Device			Window Name	Location		Display Size		Viewport Offset	
Application	Type	Name	Pri	Rov		Col	V	D	Rov	Col	
SDARTESTZZ	SDPRINTERZ	FPUTP.DAT				1	1	80	24	0	0
SDARTESTZZ					SCREEN	1	1	79	23	0	0
SDARTESTZZ					VNP	3	45	0	0	0	0
SDARTESTZZ					V3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	1			1	1	80	23	0	0
SDARTESTZZ					SCREEN	1	1	79	70	0	0
SDARTESTZZ					VNP	3	45	0	0	0	0
SDARTESTZZ					V3	3	60	10	8	0	0
SDARTESTZZ					VNP	3	45	0	0	0	0
SDARTESTZZ					V3	3	60	10	8	0	0
MENU	VT100	TT:	2			1	1	80	23	0	0

MSG: 0 status

Figure 5-52c Application Status Form

Application Status										
Application	Device			Window Name	Location		Display Size		Viewport Offset	
	Type	Name	Pri		Row	Col	V	D	Row	Col
SDARTESTZZ			1		1	1	80	24	0	0
SDARTESTZZ				SCREEN	1	1	79	23	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
SDARTESTZZ	VT100	TT:	2		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	70	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
MENU	VT100	TT:	3		1	1	80	23	0	0

MSG: 0 status

Figure 5-53a Return LDV

Change form as shown and press <ENTER>.

Command Line		chgl dv 5		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21		Display: Opened and changed to logical device: 26 .....			
Line 22		.....			
Line 23		.....			
MSG: 0		status			

Figure 5-53b Return LDV Result

Press <MODE> key to get into window manager mode and press PF14 <SELECT AP>.

Command Line		chgldv 5		form ff1	
[ ]		[ ]		[ ]	
[ ]		[ ]		[ ]	
form ff2		form ff2		form ff3	
[ ]		[ ]		[ ]	
form ff4		form ff8		form ff5	
[ ]		[ ]		[ ]	
form ff4		[ ]		form ff6	
[ ]		[ ]		[ ]	
form ff4		[ ]		form ff7	
[ ]		[ ]		[ ]	
Line 21 Display: Opened and changed to logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG:	1	Window is selected			
					window mgr

Figure 5-53c Change LDV Location

Position cursor 2 lines below the Command Line as shown and press PF10 <LOCATION>.

Command Line		MOVLDV 26 PPUTP.DAT SDPRINTERZ		form ff1	
		Command L			
		Command Line		chgl dv 5	
form ff2		fo			
form ff4		form ff2		form ff2	
form ff4		form ff4		form ff3	
form ff4		form ff4		form ff5	
form ff4		form ff8		form f	
Line 21 Display:					
Line 22		form ff4			
Line 23					
MSG: 0				window mgr	

Figure 5-53d Change Location Result

Command Line		CLSLDV 26		form ff1	
		Command Line		Command L	
		chgl dv 5			
form ff2		fo			
		form ff2		form ff2	
form ff4		form f		form ff3	
				form ff5	
form ff4		form ff4		form ff8	
Line 21 Display:		form ff4			
Line 22					
Line 23					
MSG: 0				vindow mgr	

Figure 5-54a Test CLSLDV

Command Line		CLSLDV 26		form ff1	
				Command L	
form ff2		form ff2	form ff3	form ff5	form ff6
					x
					x
form ff4		form ff8			W 3
					E F
form ff4					I J
Line 21 Display: Closed logical device: 26 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		window mgr			

Figure 5-54b CLSLDV Result

Press PF13 <FUNCTION>.

```

I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/30/87      Time: 13:01:41      User ID: MORENC      Role: 
Function:       Device Type:       Device Name: 

MSG:  Window is selected
                                window mgr

```

Figure 5-54c IISS Function Screen



I I S S   T E S T   B E D   V E R S I O N   2.3			
Date: 11/30/87	Time: 13:01:41	User ID: MORENC	Role: <input type="text" value="MANAGER"/>
Function: <input type="text" value="MM"/>	Device Type: <input type="text"/>	Device Name: <input type="text"/>	
MSG: <input type="text" value="1"/> Window is selected			
			windov mgr

Figure 5-55a Start MM

```

I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/30/87      Time: 13:01:45      User ID: MORENC      Role: MANAGER
Function:           Device Type:          Device Name:
MSG: 0
vindow mgr

```

**Figure 5-55b IISS Function Screen**

```

      I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/30/87   Time: 13:01:45   User ID: MORENC   Role: 

Function:    Device Type:    Device Name: 

MSG: 

```

Figure 5-56a Start TE

```

I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/30/87      Time: 13:01:50      User ID: MORENC      Role: MANAGER
Function:           Device Type:           Device Name:
MSG: 0
window mgr

```

Figure 5-56b IISS Function Screen

Press PF12 <UNSELECT AP>.

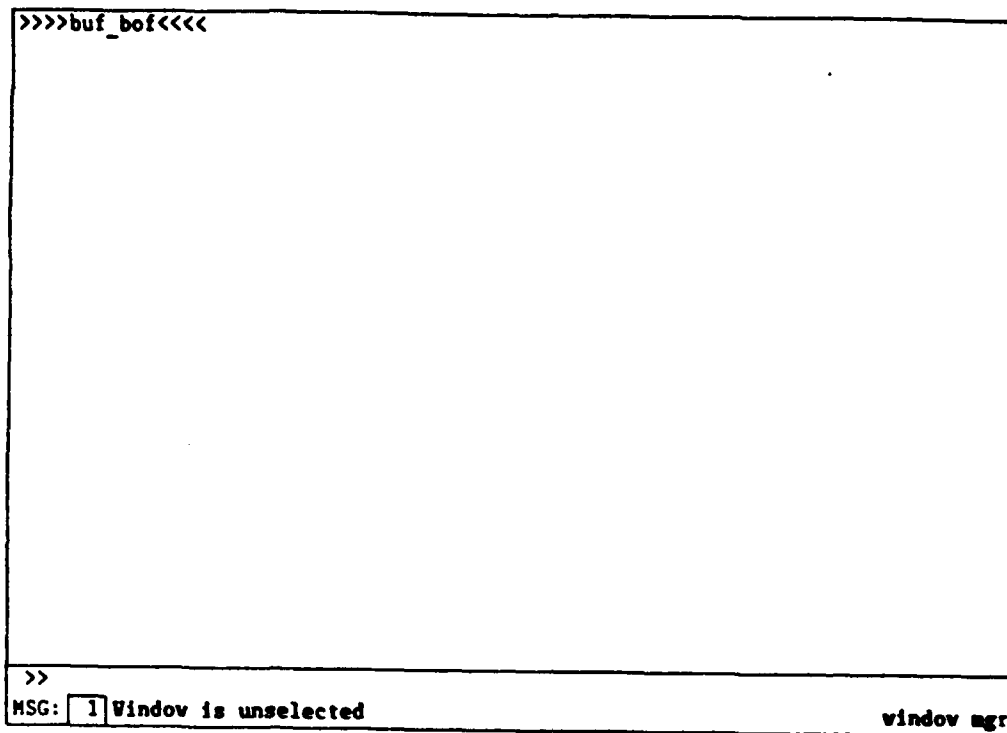


Figure 5-56c TE Screen

Press <MODE> key to get into status mode and press PF6 to display Application Staus Form.

Application Status										
Device				Window Name	Location		Display Size		Viewport Offset	
Application	Type	Name	Pri		Row	Col	V	D	Row	Col
SDTEZZZZZZ	VT100	TT:	1							
SDTEZZZZZZ				SCREEN	1	1	80	23	0	0
SDMHZZZZZZ	VT100	TT:	2							
SDMHZZZZZZ				SCREEN	1	1	80	23	0	0
SDARTESTZZ	VT100	TT:	3							
SDARTESTZZ				SCREEN	1	1	80	23	0	0
SDARTESTZZ				VNP	1	1	79	16	0	0
SDARTESTZZ				W3	1	1	80	23	0	0
SDARTESTZZ				VNP	1	1	79	69	0	0
SDARTESTZZ				W3	3	45	0	0	0	0
SDARTESTZZ				VNP	3	60	10	8	0	0
SDARTESTZZ				W3	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
MENU	VT100	TT:	4							
					1	1	80	23	0	0

MSG: 0

status

Figure 5-56d Abort TE

Position cursor on 'VT100' in SDTEZZZZZZ line and press PF8  
<ABORT>.

Application Status										
Device				Window Name	Location		Display Size		Viewport Offset	
Application	Type	Name	Pri		Row	Col	V	D	Row	Col
SDTEZZZZZZ	VT100	TT:	1	SCREEN	1	1	80	23	0	0
SDTEZZZZZZ					1	1	80	23	0	0
SDHMZZZZZZ	VT100	TT:	2	SCREEN	1	1	80	23	0	0
SDHMZZZZZZ					1	1	79	16	0	0
SDARTESTZZ	VT100	TT:	3	SCREEN	1	1	80	23	0	0
SDARTESTZZ					1	1	79	69	0	0
SDARTESTZZ				VNP	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
SDARTESTZZ				VNP	3	45	0	0	0	0
SDARTESTZZ				V3	3	60	10	8	0	0
MENU	VT100	TT:	4		1	1	80	23	0	0

MSG: 1 Application: SDTEZZZZZZ was signaled to abort status

Figure 5-56e Abort Result

Press <ENTER>.

Application Status										
Application	Device			Window Name	Location		Display Size		Viewport Offset	
	Type	Name	Pri		Row	Col	W	D	Row	Col
SDMMZZZZZZ	VT100	TT:	1		1	1	80	23	0	0
SDMMZZZZZZ				SCREEN	1	1	79	16	0	0
SDARTESTZZ	VT100	TT:	2		1	1	80	23	0	0
SDARTESTZZ				SCREEN	1	1	79	69	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
SDARTESTZZ				WNP	3	45	0	0	0	0
SDARTESTZZ				W3	3	60	10	8	0	0
MENU	VT100	TT:	3		1	1	80	23	0	0

MSG: 0

Status

Figure 5-57a Application Status Form after Aborting TE

Press <QUIT>.



**Error Message Definition Screen**  
-----

Message Base Number:

Number	MSG Name	Description
<input type="text"/>		

MSG:  status

Figure 5-57b Abort MM

Press PF8 <ABORT> and wait for screen to repaint.

Command Line		CLS LDV 26		form ff1	
<div></div>				Command L	
<div></div>				<div></div>	
<div></div>				<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21		Display: Closed logical device: 26 .....		form ff7	
Line 22		.....		<div></div>	
Line 23		.....		<div></div>	
MSG: 2		Application SDMHZZZZZ has terminated		status	

Figure 5-58a Abort Result

Press <QUIT>.

```

I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/30/87   Time: 13:02:22   User ID: MORENC   Role: 
Function:    Device Type:    Device Name: 

MSG:  Application SDARTESTZZ has terminated
                                         status

```

**Figure 5-58b IISS Function Screen**

```

I I S S   T E S T   B E D   V E R S I O N   2.3
-----
Date: 11/16/87      Time:  9:38:05      User ID: SYSMGR      Role: 
Function:       Device Type:       Device Name: 

MSG: 

```

### Figure 5-59a Restart ARTEST Application

Enter "ARTEST" as shown and press <ENTER>.

The diagram illustrates the layout of the First ARTEST Screen. It features a 'Command Line' at the top left. Below it are two empty rectangular boxes. To the right of the Command Line is a large rectangular area labeled 'form ff1'. Below the Command Line and to the left of 'form ff1' are several smaller forms: 'form ff2' (two instances), 'form ff3' (two stacked boxes), 'form ff5' (a box with a vertical bar), 'form ff6' (a vertical bar), and 'form ff7' (two vertical bars). Below these are 'form ff4' (two instances) and 'form ff8' (a horizontal bar). At the bottom left, there is a section for 'Line 21 Display:', 'Line 22', and 'Line 23'. Below this is a status bar with 'MSG: 0' and the word 'application' on the right.

Figure 5-59b First ARTEST Screen

Command Line		addfld ff4 i2 i input 1 1 ; 1 1 1 ; 1 1 6		form ff1	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	
<div style="border: 1px solid black; height: 50px; width: 100%;"></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-60a ADDFLD Test Case 1

Create a new input item field named i2 of size 1 by 1 and add it to the form ff4. The fields position is offset 1 row and 2 columns from the upper left corner of the containing forms.

Command Line		addfld ff4 i2 1 input 1 1 ; 1 1 1 ; 1 1		form ff1	
		6			
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
form ff4				form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-60b Case 1 Result

Since the form ff4 is a repeating form field, the field i2 is added to both instances of the form.

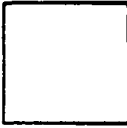

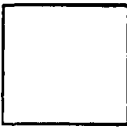


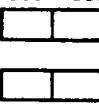



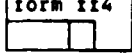
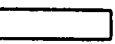

Command Line		addfld ff4 i3 1 input 1 1 i2; 1 1 0 i2; 3 1 2		form ff1	
					
					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
					
form ff4	form ff8				
					
form ff4					
					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0	application				

Figure 5-61a ADDFLD Test Case 2

Create a new input item field named i3 of size 1 by 1 and add it to the form ff4. The field is positioned relative to i2.



Command Line		addfld ff4 i3 i input 1 1 i2; 1 1 0 i2; 3 1 2		form ff1	
<div></div>				<div></div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff4				form ff7	
<div></div>				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-61b Case 2 Result

The field i3 appears to the right of i2 as specified.

Command Line		crtfld ff5 ff5_i2		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-62a CRTFLD Test Case

Create a field named ff5\_i2 on the form ff5. Define no other properties of the field at this time. There are no changes in the terminal screen at this time.

Command Line		setloc ff5 ff5_i2 ; 1 1 2 ; 1 1 5		form ff1	
<div style="border: 1px solid black; width: 50px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 50px; height: 40px;"></div>		<div style="border: 1px solid black; width: 50px; height: 100px; margin-left: 10px;"></div>			
form ff2		form ff2		form ff3	
<div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 30px; height: 10px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 10px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 10px; display: inline-block;"></div>	
form ff4				form ff6	
<div style="border: 1px solid black; width: 30px; height: 10px; display: inline-block;"></div>				<div style="border: 1px solid black; width: 10px; height: 20px; display: inline-block;"></div>	
				form ff7	
				<div style="border: 1px solid black; width: 10px; height: 20px; display: inline-block;"></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-62b Specify Field Location

Use SETLOC to define the location of ff5\_i2 to be offset 2 rows and 3 columns from the upper left corner of the containing form.

Command Line		setdis ff5 ff5_i2 input		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		<div style="border: 1px solid black; height: 100px; width: 100%;"></div>			
form ff2		form ff2		form ff3	
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	
form ff4				form ff6	
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>				<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	
Line 21 Display: .....		form ff7			
Line 22 .....		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>			
Line 23 .....		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>			
MSG: 0		application			

Figure 5-62c Specify Field Display Attribute

Use SETDIS to define the display attribute of the field ff5\_i2 to be input.

Command Line		setdis ff5 ff5_i2 input		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-62d Test Case Result

The field is now visible on form ff5.

Command Line		repfld ff8 i1 ff5 i2		form ff1	
<div style="border: 1px solid black; width: 80px; height: 60px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 60px;"></div>		<div style="border: 1px solid black; width: 80px; height: 120px;"></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 30px; height: 20px;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-63a REPFLD Test Case

Create a copy of the item field i1 on form ff8. Name the field i2 and attach it to form ff5 without giving it a location. There will be no changes on the terminal screen at this time.

Command Line		setloc ff5 i2 ; 1 1 1 ; 1 1 1		form ff1	
<div style="border: 1px solid black; width: 60px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div>		<div style="border: 1px solid black; width: 60px; height: 100px;"></div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 10px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 10px; height: 10px; display: inline-block;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 10px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 40px; height: 10px; display: inline-block;"></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 10px; display: inline-block;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0					application

Figure 5-63b Specify an Absolute Field Location

Use SETLOC to position the field i2 on form ff5 1 row and 1 column from the upper left corner of ff5.

Command Line		setloc ff5 i2 ; 1 1 1 ; 1 1 1		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-63c Test Case Result

The field is now visible on form ff5.



Command Line		mvrfld ff8 i1 ff6 i2 ; 1 1 1 ; 1 1 1		form ff1	
<div style="border: 1px solid black; width: 60px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div>		<div style="border: 1px solid black; width: 60px; height: 100px; margin-left: 10px;"></div>			
form ff2		form ff2		form ff3	
<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>		<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	
form ff4				form ff6	
<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>				<div style="border: 1px solid black; width: 10px; height: 20px; display: inline-block;"></div>	
				form ff7	
				<div style="border: 1px solid black; width: 10px; height: 20px; display: inline-block;"></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-64a MVRFLD Test Case

Copy a field and define the position to be offset 1 row and 1 column from the origin of form ff6.

Command Line		mvrfld ff8 i1 ff6 i2 ; 1 1 1 ; 1 1 1		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-64b Test Case Result

The original field is i1 on form ff8. The copy is named i2 and now appears on the form ff6.

Command Line		rmvfld ff6 i2		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	<div></div>				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-65 RMVFLD Test Case with Result

Remove field i2 from form ff6. The form ff6 appears as it did before calling MVRFLD.

Command Line		repfrm ff4 ff42		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 10px; height: 10px;"></div>	<div style="border: 1px solid black; width: 10px; height: 10px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-66a REPFRM Test Case

Create a copy of the form ff4 and call it ff42. There will be no changes on the terminal screen at this time.

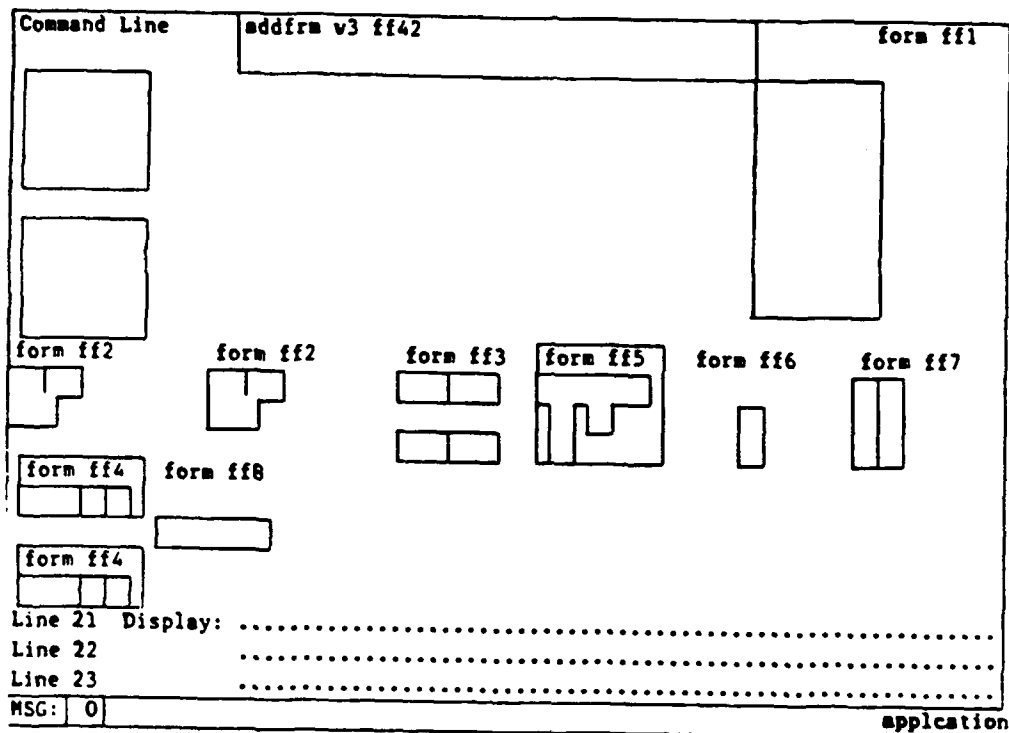


Figure 5-66b Test Case Result

The form is added to the window W3 so that it becomes visible and you can see that the form copy was actually created. Note that only a single instance of ff4 appears.

Command Line		crtfrm ff54		form ff1	
<div style="border: 1px solid black; width: 80px; height: 60px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 60px;"></div>				<div style="border: 1px solid black; width: 80px; height: 120px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; border: 1px solid black; width: 30px; height: 20px;"></div> </div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 40px;"></div>	<div style="border: 1px solid black; width: 80px; height: 60px;"></div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>	<div style="border: 1px solid black; width: 30px; height: 60px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-67a CRTFRM Test Case

Create a form named ff54. There will be no changes on the terminal screen at this time.

Command Line		addfld ff54 11 1 input 3 1 ; 1 1 0 ; 1 1 1		form ff1	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				<div style="border: 1px solid black; padding: 5px;"> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>	
form ff2		form ff2		form ff3	
<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		<div style="border: 1px solid black; width: 100%; height: 100%;"></div>	
form ff4		form ff8		form ff5	
<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		<div style="border: 1px solid black; width: 100%; height: 100%;"></div>	
form ff4				form ff6	
<div style="border: 1px solid black; width: 100%; height: 100%;"></div>				<div style="border: 1px solid black; width: 100%; height: 100%;"></div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-67b Add a Field to the Form

Use ADDFLD to add an input item field, i1, to the form ff54. Its position is offset 0 rows and 1 column from the origin of ff54. There will be no changes on the terminal screen at this time.

Command Line		rplfrm v3 1 ff54		form ff1	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-67c Test Case Result

The form is added to the window W3 so that it becomes visible and you can see that it was actually created.



Command Line		makfrm ff59 black 2 2		form ff1	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-68a MAKFRM Test Case

Create a form named ff59 with a black background and a size of 2 by 2.


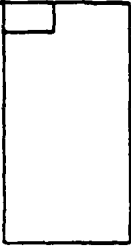




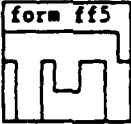


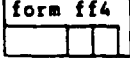

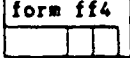
Command Line		addfld ff5 ff59 f black 2 2 ; 1 1 2 ; 1 1 8		form ff1	
					
					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
					
form ff4	form ff8				
					
form ff4					
					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-68b Test Case Result

The form ff59 is added as a form field to the form ff5 with a position offset 2 rows and 8 columns from the origin of ff5 to show that it was actually created.

Command Line		rplfrm w3 1 ff14		form ff1		
<div></div>		<div></div>		<div></div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div></div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-69a GDPFEX Test Preparation

Use RPLFRM to replace the current form in page 1 of w3 with form ff14.

Command Line		rplfrm v3 1 ff14		form ff1	
<div></div>		<div></div>		<div>XXX</div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			
<div></div>		<div></div>			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-69b RPLFRM Result

Command Line		pdata ff14.i1 " 17"		form ff1	
<div></div>		<div></div>		<div>XXXX</div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-69c Set Value of Item i1

Use PDATA to set the value of the item field i1 on ff14 to "17".

Command Line		pdata ff14.11 " 17"		form ff1	
				<div>17 17</div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-69d PDATA Result

Command Line		gdpfex ff14 i1 1		form ff1	
				<div>17 xxx</div> <div>17</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
form ff4				form ff7	
Line 21 Display: I2		.....			
Line 22		.....			
Line 23		.....			
MSG: 0		application			

Figure 5-70a GDPFEX Test Case 1 with Result

Get the first field in the form ff14 which has a VALUE clause referring to the item field i1. It is i2.

Command Line		gdpfex ff14 i1 2		form ff1	
<div style="border: 1px solid black; width: 80px; height: 60px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 80px; height: 60px;"></div>		<div style="border: 1px solid black; width: 80px; height: 120px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; border: 1px solid black; padding: 2px;">17</div> <div style="position: absolute; top: 15px; right: 5px; border: 1px solid black; padding: 2px;">17</div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 40px;"></div>	<div style="border: 1px solid black; width: 80px; height: 60px;"></div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>	<div style="border: 1px solid black; width: 30px; height: 60px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1 No dependent value clause found					application

Figure 5-70b GDPFEX Test Case 2 with Result

Get the second field in the form ff14 which has a VALUE clause referring to the item field i1. There is no such field. The form ff14 only contains one field that has a value clause expression referring to item i1.



Command Line		gdpfex ff14 i1 0		form ff1	
				17 xxx	
				17	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
				form ff7	
Line 21 Display: I2 .....					
Line 22 .....					
Line 23 .....					
MSG: 1		No dependent value clause found			application

Figure 5-70c GDPFEX Test Case 3 with Result

Get the last field in the list of fields whose value depends on the item field i1. Since there is only one such field, i2, this field name is returned.

Command Line		gdpflc ff14 i1 1		form ff1	
				<div>17</div> <div>17</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
				form ff7	
Line 21 Display: I3 .....					
Line 22 .....					
Line 23 .....					
MSG:	1	No dependent value clause found			application

Figure 5-71 GDPFLC Test Case with Result

Get the first field in the form ff14 which has a location clause referring to the item field i1. The first such field is i3. The location of i3 is relative to i1.

Command Line		gfmfld ff3 1		form ff1	
<div style="border: 1px solid black; width: 100px; height: 100px; margin-bottom: 10px;"></div> <div style="border: 1px solid black; width: 100px; height: 100px;"></div>		<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <span style="position: absolute; top: 5px; right: 5px;">17 xxx</span> <span style="position: absolute; top: 20px; right: 5px;">17</span> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; bottom: 5px; left: 5px;">J</span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; bottom: 5px; left: 5px;">J</span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> <span style="position: absolute; top: 45px; left: 5px;"></span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> <span style="position: absolute; top: 45px; left: 5px;"></span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> </div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> </div>	<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> </div>				
form ff4					
<div style="border: 1px solid black; width: 50px; height: 50px; position: relative;"> <span style="position: absolute; top: 5px; left: 5px;"></span> </div>					
Line 21 Display: name = I1 type = I .....					
Line 22 .....					
Line 23 .....					
MSG: 1		No dependent value clause found			application

Figure 5-72a GFMFLD Test Case 1 with Result

Get the first field belonging to the form ff3. The name of this field is i1, and it is an item field.

Command Line		gfmfld ff3 2		form ff1	
<div style="border: 1px solid black; width: 60px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div>		<div style="border: 1px solid black; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;">17</div> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;">17</div> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;">xxx</div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>	<div style="border: 1px solid black; width: 20px; height: 10px;"></div>				
form ff4					
<div style="border: 1px solid black; width: 20px; height: 10px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	2	End of field list			application

Figure 5-72b GFMFLD Test Case 2 with Result

Get the second field belonging to the form ff3. There is only one field in ff3 as the message shows.

Command Line		gfmfld ff1 9		form ff1	
				<div>17 xxx</div> <div>17</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4				form ff6	
				form ff7	
Line 21 Display: name = FF3 type = P .....					
Line 22 .....					
Line 23 .....					
MSG: 2		End of field list		application	

Figure 5-72c GFMFLD Test Case 3 with Result

Get the ninth field belonging to the form ff1. The name of this field is ff3, and it is a form field.

Command Line		gfmfld ff1 -1		form ff1	
				17	
				17	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
form ff4	form ff8				
form ff4					
Line 21 Display: name = FF8 type = F .....					
Line 22 .....					
Line 23 .....					
MSG:	2	End of field list			application

Figure 5-72d GFMFLD Test Case 4 with Result

Get the next to the last field belonging to the form ff1. The name of this field is ff8, and it is a form field.

Command Line		gfmfld ff1 -12		form ff1	
<div style="border: 1px solid black; width: 80px; height: 50px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 50px;"></div>		<div style="border: 1px solid black; width: 80px; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; border: 1px solid black; padding: 2px;">17</div> <div style="position: absolute; top: 15px; right: 5px; border: 1px solid black; padding: 2px;">17</div> <div style="position: absolute; top: 15px; right: 15px; border: 1px solid black; padding: 2px;">xxx</div> </div>			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 30px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 40px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 40px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 10px; height: 20px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 20px; height: 30px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 40px; height: 15px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 15px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>				
form ff4					
<div style="border: 1px solid black; width: 40px; height: 15px; position: relative;"><div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%;"></div></div>					
Line 21 Display: name = I4 type = 1 .....					
Line 22 .....					
Line 23 .....					
MSG: 2		End of field list		application	

Figure 5-72e GFMFLD Test Case 5 with Result

Get the field belonging to the form ff1 which is twelfth from the last. The name of this field is i4, and it is an item field.

Figure 5-73a ADDBIM Test Case

Add a repeat specification to the item field `il` in the form `ff8` which indicates that `il` repeats vertically twice with no spaces and that both instances are actually displayed.



Command Line		adddim ff8 i1 2 2 v 0		form ff1	
				<div>17</div> <div>17</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff4				form ff7	
<div></div>				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 2		End of field list		application	

Figure 5-73b Test Case Result

The box below the "form ff8" shows the result of making i1 an array.

Command Line		setdom ff8 i1 "right,numeric,maximum 20, minimum 10"		form ff1	
				<div>17</div> <div>17</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 2		End of field list		application	

Figure 5-74a SETDOM Test Case 1

Establish a domain clause for the repeating item field i1 on the form ff8. Define i1 to be a must enter, right justified, numeric field with a minimum value of 10 and a maximum value of 20.

Command Line		setdom ff8 i1 "right,numeric,maximum 20, minimum 10"		form ff1	
				<div>17</div> <div>17</div> <div>xxx</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		abc		form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 2		End of field list		application	

Figure 5-74b Test Verification

A data value of "abc" is entered in the item field i1 on form ff8.

Command Line		setdom ff8 il "right,numeric,maximum 20, minimum 10"		form ff1	
<div></div>		<div></div>		<div>17</div> <div>17</div> <div>xxx</div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div></div>		<div></div>	
form ff4		abc		form ff6	
<div></div>		<div></div>		<div></div>	
form ff7					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 3		Field must contain only integer numbers			
		application			

Figure 5-74c Domain Check Result

The value is right justified but since "abc" is not numeric, an error message is issued.

Command Line		setdom ff8 il "right,numeric,maximum 20, minimum 10"		form ff1	
				<div>17</div> <div>17</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div>21</div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
				form ff7	
				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 3		Field value is out of range			application

Figure 5-74d Invalid Value with Result

Entering an out of range numeric value results in an error message in the message line.

Command Line		setdom ff8 11 "right,numeric,maximum 20, minimum 10"		form ff1		
<div></div>		<div></div>		<div>17  ✕ 17</div>		
<div></div>		<div></div>		<div></div>		
form ff2		form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8				
<div></div>		<div>11</div>				
form ff4						
<div></div>						
Line 21 Display: .....						
Line 22 .....						
Line 23 .....						
MSG: 0		application				

Figure 5-74e Valid Value with Result

The value "11" satisfies all of the domain constraints and is accepted as a valid value.

Command Line		rmvdim ff8 i1 1		form ff1	
				<div>17 XXX</div> <div>17</div>	
form ff2		form ff2		form ff3	
<div>form ff4</div> <div>form ff4</div>		form ff8		form ff5	
		11		form ff6	
				form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-75a RMVDIM Test Case

Remove the array dimension from item field i1 on form ff8.

Command Line		rmvdim ff8 i1 1		form ff1	
				<div>17 <del>xxx</del> 17</div>	
form ff2		form ff2	form ff3	form ff5	form ff6
<div>form ff2</div>		<div>form ff2</div>	<div>form ff3</div>	<div>form ff5</div>	<div>form ff6</div>
form ff4		form ff8			form ff7
<div>form ff4</div>		<div>11</div>			<div>form ff7</div>
form ff4					
<div>form ff4</div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-75b Test Case Result

The form ff8 now only contains one occurrence of the item field i1.



Command Line		setdom ff8 i1 "left,must enter,character ,upper"		form ff1	
				17 xxx 17	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		11		form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-76a SETDOM Test Case 2

Redefine the item field i1 on the form ff8 to be a required entry character field that is to be left justified and shifted to upper case.

Command Line		setdon ff8 il "left,must enter,character ,upper"		form ff1	
<div></div>				<div>17 XXX 17</div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div></div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Field must be entered			application

Figure 5-76b Test Verification

Pressing the <ENTER> key without entering any data results in the message that data must be entered in the field.

Command Line		setdom ff8 i1 "left,must enter,character,upper"		form ff1	
<div></div>				<div>17 17</div>	
<div></div>					
form ff2		form ff2	form ff3	form ff5	form ff6
<div></div>		<div></div>	<div></div>	<div></div>	<div></div>
form ff4		form ff8			form ff7
<div></div>		<div>abc</div>			<div></div>
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Field must be entered			application

Figure 5-76c Data Value "abc" Entered

The character string "abc" is entered in the field i1.

Command Line		setdom ff8 i1 "left,must enter,character ,upper"		form ff1	
				<div>17 xxx</div> <div>17</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		ABC		form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-76d Domain Check Result

As per the domain clause, the string "abc" is shifted to upper case and left justified.

Command Line		setpro ff1 w1 window_1 w1 1 2 -1 w1 2 2		form ff1	
		0		<div>17 XXX</div> <div>17</div>	
<div></div> <div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		<div>ABC</div>		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
Line 21 Display: .....				form ff7	
Line 22 .....				<div></div>	
Line 23 .....				<div></div>	
MSG: 0				application	

Figure 5-77a SETPRO Test Case 1

Attach a prompt to the window w1 on the form ff1.

Command Line	setpro ffi vl window_1 vl 1 2 -1 vl 2 2	form ffi
window_1	0	17 XXX 17
<div>form ffi2</div> <div>form ffi2</div> <div>form ffi3</div> <div>form ffi5</div> <div>form ffi6</div> <div>form ffi7</div> <div>form ffi4</div> <div>form ffi8</div> <div>ABC</div> <div>form ffi4</div>		
Line 21 Display: .....		
Line 22 .....		
Line 23 .....		
MSG:	0	application

Figure 5-77b Case 1 Result

The prompt "window\_1" appears centered one line above w1.

Command Line		setpro ff8 " " "blnk line" ; 1		form ff1	
window 1		1 1 ; 1 1 1		17 xxx 17	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		ABC		form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0		application			

Figure 5-77c SETPRO Test Case 2

Define a background prompt for the form ff8 at the position offset 1 row and 1 column from the upper left corner of ff8.

Command Line		setpro ff8 " " "blnk line" ; 1		form ff1	
window 1		1 1 ; 1 1 1		17 XXXX	
				17	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		ABC		form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-77d Case 2 Result

The prompt, "blnk line", appears below the prompt, "form ff8".



Command Line		setpro ff1 w3 "<-w3" w3 2 1 0 w3 3 1 2		form ff1	
vindow 1				<div>17 XXX</div> <div>17</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff4</div> <div>form ff4</div>		<div>form ff3</div> <div>form ff5</div>		<div>form ff6</div> <div>form ff7</div>	
<div>form ff8</div> <div>blnk line</div> <div>ABC</div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-77e SETPRO Test Case 3

Attach a prompt to the window field w3 on ff1 that is positioned relative to w3, centered vertically and offset 2 horizontally.

Command Line		setpro ff1 v3 "<-v3" v3 2 1 0 v3 3 1 2		form ff1	
window 1				<div style="border: 1px solid black; padding: 5px;"> 17 XXX  17  &lt;-v3 </div>	
<div style="border: 1px solid black; width: 80px; height: 60px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 80px; height: 60px;"></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	<div style="border: 1px solid black; width: 80px; height: 60px;"></div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>	<div style="border: 1px solid black; width: 20px; height: 40px;"></div>
form ff4	form ff8				
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>	blnk line				
	ABC				
form ff4					
<div style="border: 1px solid black; width: 60px; height: 20px;"></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-77f Case 3 Result

The prompt, "<- w3", appears on the form ff1.

Command Line window 1		setatt ff3 input white black bold,unders core,slowblink,reverse,tabfield		form ff1	
<div></div>		<div></div>		<div>17 XXX 17 ←v3</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		blnk line		<div></div>	
<div></div>		ABC		form ff6	
form ff4				<div></div>	
<div></div>				form ff7	
<div></div>				<div></div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-78a SETATT Test Case

Define an attribute clause for "input" on the form ff3.

Command Line		setatt ff3 input white black bold,unders		form ff1	
window 1		core,slovblink,reverse,tabfield		<div>17 XXXX</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff4</div> <div>form ff8</div> <div>form ff4</div>		<div>form ff3</div> <div>form ff5</div> <div>form ff6</div> <div>form ff7</div>		<div>form ff8</div> <div>blnk line</div> <div>ABC</div>	
Line 21 Display: .....		.....			
Line 22 .....		.....			
Line 23 .....		.....			
MSG:	0	application			

Figure 5-78b Test Case Result

The item i1 on ff3 has the display attribute "input" and now shows the properties defined for this attribute: a foreground color of white and background color of black. It is also bold, underscore, slowblink, reverse, and tabfield.

Command Line		setdis ff3 i1 output		form ff1	
vindow 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff4</div> <div>form ff4</div>		<div>form ff2</div> <div>form ff3</div> <div>form ff5</div>		<div>form ff6</div> <div>form ff7</div>	
<div>form ff8</div> <div>blnk line</div> <div>ABC</div>					
<div>Line 21 Display: .....</div> <div>Line 22 .....</div> <div>Line 23 .....</div>					
MSG: 0		application			

Figure 5-79a SETDIS Test Case 1

Define the display attribute of item i1 on form ff3 to be output.

Command Line		setdis ff3 i1 output		form ff1	
window 1				<div>17 XXX 17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
<div>form ff4</div>		<div>form ff8</div> <div>blnk line</div> <div>ABC</div>		<div>form ff5</div>	
<div>form ff4</div>				<div>form ff6</div>	
Line 21 Display: .....				<div>form ff7</div>	
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-79b Case 1 Result

Since the field i1 contains no data, it does not appear on the form ff3.

Command Line		setdis ff3 i1 input		form ff1	
vindow 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff4</div> <div>form ff4</div>		<div>form ff2</div> <div>form ff3</div> <div>form ff5</div>		<div>form ff6</div> <div>form ff7</div>	
<div>form ff8</div> <div>blnk line</div> <div>ABC</div>					
<div>Line 21 Display: .....</div> <div>Line 22 .....</div> <div>Line 23 .....</div>					
MSG: 0		application			

Figure 5-79c Return Attribute to Input

Use SETDIS again to reset i1's display attribute to input.

Command Line		setdis ff1 w2 white		form ff1	
windov_1				<div>17</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff3</div> <div>form ff4</div> <div>form ff4</div>		<div>form ff2</div> <div>form ff3</div> <div>form ff5</div> <div>form ff6</div> <div>form ff7</div>		<div>form ff8</div> <div>blnk line</div> <div>ABC</div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG:	0	application			

Figure 5-79d SETDIS Test Case 2

Set the display color of the window w2 on form ff1 to be white instead of its original color, black.



The screenshot shows a terminal window with a graphical user interface. At the top, there is a 'Command Line' area with the text 'setdis ff1 v2 white' and 'window 1'. Below this, there are several rectangular boxes representing forms. The top right box is labeled 'form ff1' and contains the text '17', '17', and '<-v3'. Below it, there are six boxes labeled 'form ff2', 'form ff2', 'form ff3', 'form ff5', 'form ff6', and 'form ff7'. To the left of these, there are two boxes labeled 'form ff4' and 'form ff8', with the text 'blk line' and 'ABC' below them. At the bottom, there is a section for 'Line 21 Display:', 'Line 22', and 'Line 23', followed by a 'MSG:' field with the value '0'. The bottom right corner of the terminal window shows the text 'application'.

Figure 5-79e Case 2 Result

This makes all four occurrences of the window visible against the black background of the containing form, ffl.

Command Line window 1		sethlp ff3 i1 a		form ff1	
				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8 blnk line ABC		form ff5	
form ff4				form ff6	
				form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		Press the <HELP> key.			application

Figure 5-80a SETHLP Test Case 1

Define the help for the item field i1 on form ff3 to be application help.

Command Line		sethlp ff3 i1 a		form ff1	
window 1				<div>17 XXXX</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
<div>blnk line</div> <div>ABC</div>		form ff6		form ff7	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 1		This is an application help		application	

Figure 5-80b Case 1 Result

Positioning the cursor in item field i1 and pressing the <HELP> key causes the message to appear in the message line.

[illegible]

Figure 5-80c SETHLP Test Case 2

Help for the item field i1 on form ff3 is defined to be a string that will be displayed in the message line

Command Line window 1		sethlp ff3 i1 s "test string"		form ff1	
<div></div>		<div></div>		<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
<div></div>		<div></div>		<div></div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
form ff4	form ff8				
<div></div>	blnk line				
	ABC				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	3	test string			application

Figure 5-80d Case 2 Result

Positioning the cursor in item field i1 and pressing the <HELP> key causes the message to appear in the message line. Press the <ENTER> key to continue.




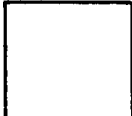




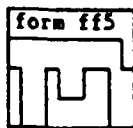


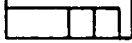
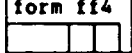
Command Line window 1		sethlp ff3 i1 f ff2		form ff1	
				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
					
form ff4	form ff8				
	blnk line				
	ABC				
form ff4					
					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	1	Press the <HELP> key.			
					application

Figure 5-80e SETHLP Test Case 3

Help for the item field i1 on form ff3 is defined to be the form ff2.

The image shows a terminal window with a large rectangular frame. In the top-left corner of the frame, there is a small box labeled "form ff2" containing a simple line drawing of a form with two fields. At the bottom-left of the frame, the text "MSG: 1 Press the <HELP> key." is displayed. At the bottom-right of the frame, the word "application" is displayed.

Figure 5-80f Case 3 Result

When the cursor is in the item field i1 on the form ff3 and the <HELP> key is pressed, the form ff1 is replaced by the form ff2 on the terminal screen. Press the <QUIT> key to return to ARTEST and then press the <ENTER> key to continue.

Command Line		setloc ff2 i2 il(1); 1 1 1 il(2); 1 1 3		form ff1	
window 1				<div>17</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		ABC		form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-81a SETLOC Test Case 1

Change the location of the item field i2 on the form ff2.  
Define it to be positioned relatively to the first and second  
occurrences of il.



Command Line		setloc ff2 i2 i1(1); 1 1 1 i1(2); 1 1 3		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		ABC		form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-81b Case 1 Result

The item field i2 appears 1 row below i1(1) and 3 columns to the right of the left edge of i1(2).

Command Line		setloc ff2 i2 ; 1 1 2 ; 1 1 2		form ff1	
window 1				<div>17</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blank line		form ff6	
form ff4		ABC		form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-81c SETLOC Test Case 2

Redefine the position of i2 on ff2 in absolute terms.

Command Line		setloc ff2 i2 ; 1 1 2 ; 1 1 2		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		ABC		form ff7	
Line 21 Display:		.....			
Line 22		.....			
Line 23		.....			
MSG:	0	application			

Figure 5-81d Case 2 Result

The item field i2 is placed a row 3 and column 3 or form ff2.

Command Line		setnam ff8 i1 i2		form ff1	
window 1				17 17 MAX ←v3	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		form ff6		form ff7	
Line 21 Display: .....		form ff8		form ff5	
Line 22 .....		blink line		form ff6	
Line 23 .....		ABC		form ff7	
MSG: 0				application	

Figure 5-82a SETNAM Test Case 1

Change the name of the item field i1 on ff8 to be i2.

Command Line		pdata ff8.i2 12345678		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		12345678		form ff7	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-82b Test Verification

Use PDATA to insert data into the item field now named i2. This verifies that the name change was successful.

Command Line		setdim ff3 i1 1 1 2 v 1		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		form ff6		form ff7	
<div>blnk line</div> <div>12345678</div>					
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-83a SETDIM Test Case

Form ff3 currently contains the item field i1 that repeats twice horizontally and then this array is repeated twice vertically. The vertical repetition is changed to be 1 displayed instance and 2 actual instances.

Command Line		setdim ff3 i1 1 1 2 v 1		form ff1	
window 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
<div>blnk line</div> <div>12345678</div>		form ff6		form ff7	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-83b Test Result

The second vertical repetition of i1 array is no longer displayed.

Command Line		settyp ff1 ff3 i		form ff1	
window 1				17 XXX 17 ←v3	
form ff2		form ff2		form ff3	
form ff4		form ff8 blnk line 12345678		form ff5	
form ff4				form ff6	
Line 21 Display: .....				form ff7	
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-84a SETTYP Test Case 1

Change the form field ff3 on the form ff1 to an item field.



Command Line		settyp ff1 ff3 i		form ff1	
window 1				17	xxx
				17	
				<-v3	
form ff2		form ff2		form ff5	
form ff4		form ff8		form ff6	
		blnk line		form ff7	
		12345678			
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-84b Case 1 Result

Form ff3 no longer appears on the screen.

Command Line		pdata ff1.ff3 "1234567890"		form ff1	
window 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div>		<div>form ff5</div> <div>form ff6</div> <div>form ff7</div>			
<div>form ff4</div> <div>form ff8</div> <div>blnk line</div> <div>12345678</div>					
<div>form ff4</div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0			application	

Figure 5-84c Test Verification

To verify that the field is now an input item, PDATA is used to enter the value "1234567890"

Command Line		pdata ff1.ff3 "1234567890"		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		1234567890	
form ff4		form ff8		form ff5	
<div>blnk line</div> <div>12345678</div>		form ff6		form ff7	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-85a SETSIZ Test Case 1

Change the size of the field ff3 on the form ff1 to be 4 by 4.

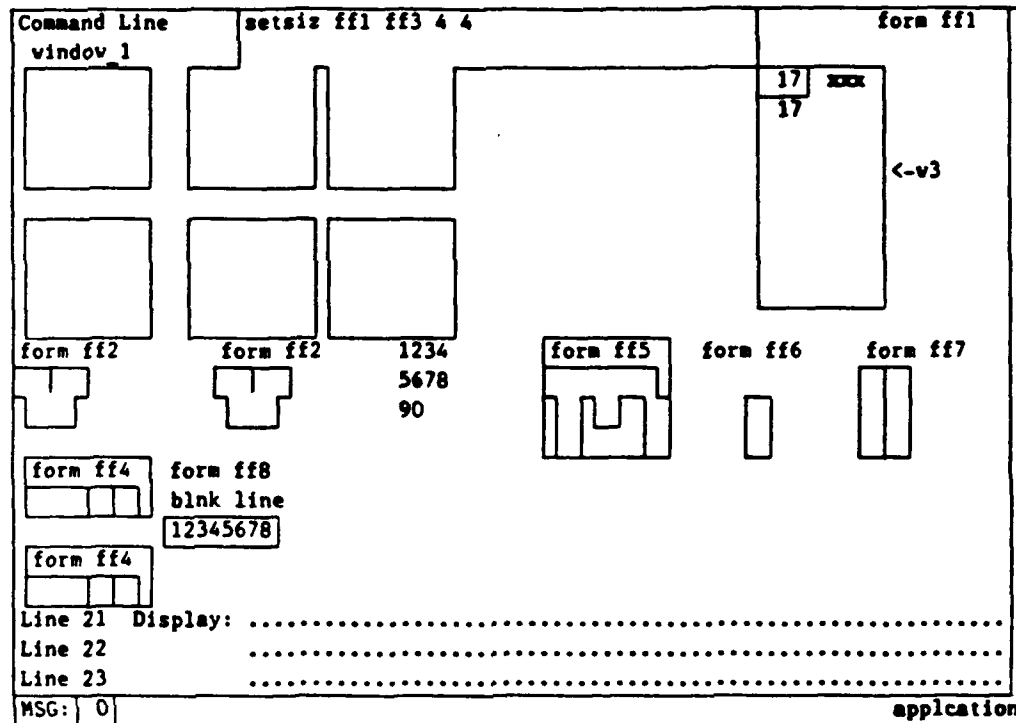


Figure 5-85b Case 1 Result

The reorganization of the data in ff3 shows that the size was changed.

Command Line		setsiz ff1 ff3 10 4		form ff1	
windov 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div>		<div>form ff2</div>		<div>1234</div> <div>5678</div> <div>90</div>	
<div>form ff4</div>		<div>form ff8</div> <div>blnk line</div> <div>12345678</div>		<div>form ff5</div>	
<div>form ff4</div>				<div>form ff6</div>	
				<div>form ff7</div>	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-85c SETSIZ Test Case 2

Change the size of the item field ff3 on form ff1 to 10 by 4.

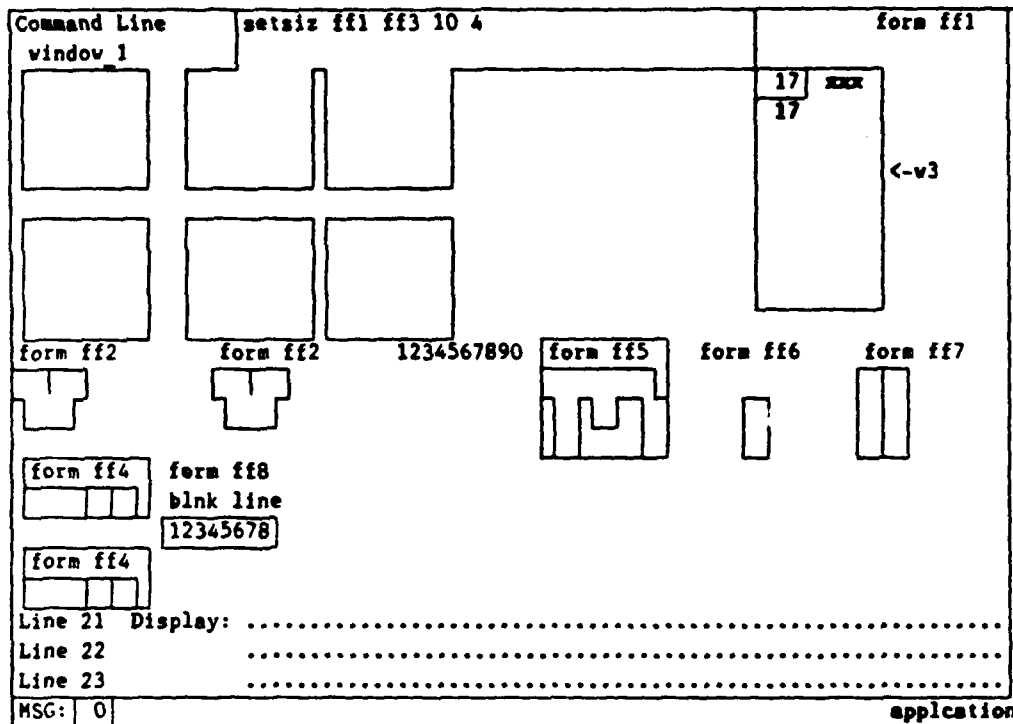


Figure 5-85d Case 2 Result

The data contained in ff3 are reorganized to reflect the size change.

Command Line		settyp ff1 ff3 f		form ff1	
window 1				17	xxx
				17	
				<-v3	
form ff2		form ff2	1234567890	form ff5	form ff6
form ff4		form ff8	12345678		form ff7
form ff4		blnk line			
Line 21 Display:		.....			
Line 22		.....			
Line 23		.....			
MSG:	0	application			

Figure 5-86a SETTYP Test Case 2

Change the item field ff3 back to a form.

Command Line		settyp ff1 ff3 f		form ff1	
window 1				17	xxx
				17	
					<-v3
form ff2	form ff2	form ff3	form ff5	form ff6	form ff7
form ff4	form ff8				
	blnk line				
	12345678				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-86b Case 2 Result

The original form ff3 reappears.



Command Line		setsiz ff3 i1 2 1		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
<div>12345678</div> <div>12345678</div>		<div>12345678</div> <div>12345678</div>		<div>12345678</div> <div>12345678</div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-87a SETSIZ Test Case 3

Change the size of the item field i1 on form ff3 to be 2 by 1 instead of 3 by 1.

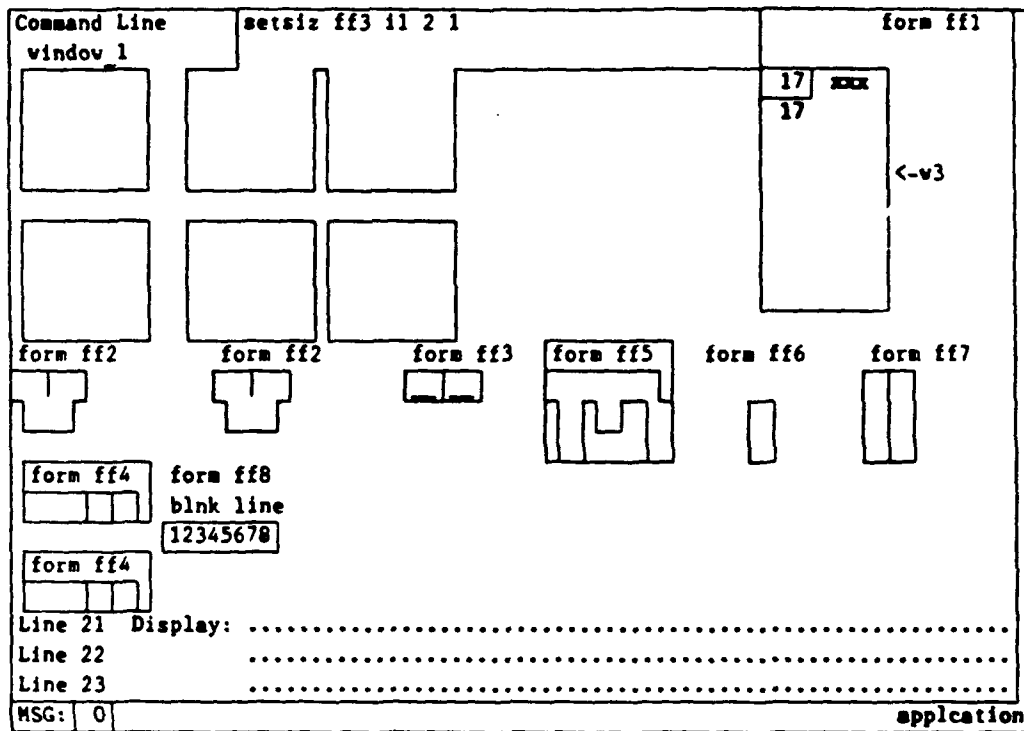


Figure 5-87b Case 3 Result

Since il is an item array, the size is changed on all instances of il.

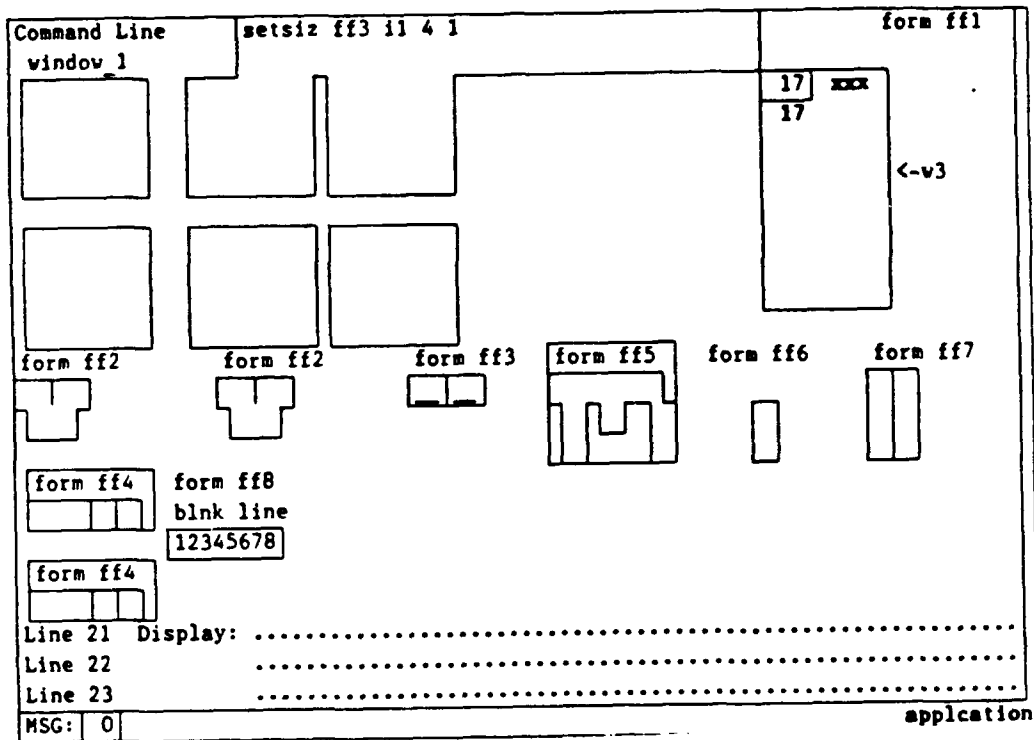


Figure 5-87c SETSIZ Test Case 4

Increase the size of item i1 on form ff3 to be larger than the original size of 3 by 1.

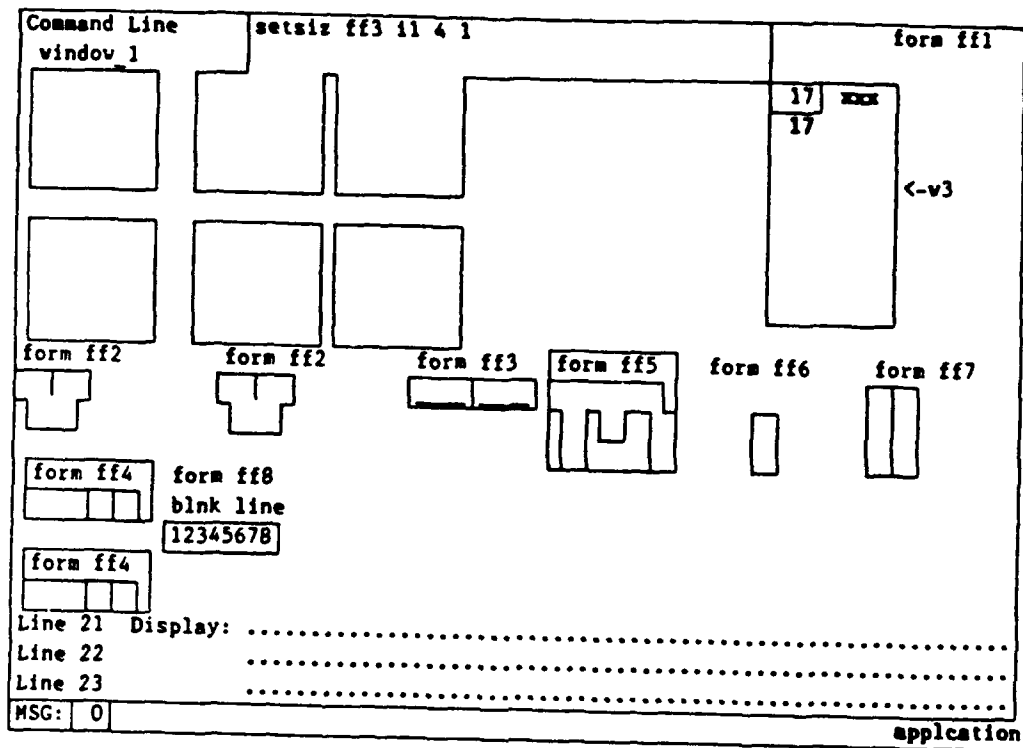


Figure 5-87d Case 4 Result

Again, the size is increased to 4 by 1 on all instances of il in the form ff3.

Command Line		settyp ff1 ff7 v		form ff1	
windov 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff3</div> <div>form ff5</div> <div>form ff6</div> <div>form ff7</div>					
<div>form ff4</div> <div>form ff8</div> <div>blnk line</div> <div>12345678</div>					
<div>form ff4</div> <div>form ff4</div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-88a SETTYP Test Case 3

change the form field ff7 on the form ff1 a window field.

Command Line		settyp ff1 ff7 v		form ff1	
windov 1				17 17	
				<-v3	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		12345678			
Line 21 Display:		.....			
Line 22		.....			
Line 23		.....			
MSG: 0				application	

Figure 5-88b Case 3 Result

By default the background color of the window is black, the same as its containing form and so it does not appear.

Command Line		addfrm ff1.ff7 ff3		form ff1	
window 1				17 xxx 17 <-v3	
form ff2		form ff2		form ff3	
form ff4		form ff8 blnk line 12345678		form ff5	
form ff4				form ff6	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0				application	

Figure 5-88c Test Verification

To verify that field ff7 is now a window field, use ADDFRM to add the form ff3 to it.

Command Line		addfrm ff1.ff7 ff3		form ff1	
window 1				<div>17 XXX</div> <div>17</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
<div>blnk line</div> <div>12345678</div>		form ff6		form ff3	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-88d ADDFRM Result

Form ff3 does appear where the form ff7 was.



Command Line		setval ff14 i1 ""zzz""		form ff1	
window 1				<div>17 xxx</div> <div>17</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff3</div> <div>form ff5</div> <div>form ff6</div> <div>form ff3</div>					
<div>form ff4</div> <div>form ff8</div> <div>blnk line</div> <div>12345678</div>					
<div>form ff4</div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0			application	

Figure 5-89a SETVAL Test Case 1

Define a VALUE clause for the item field i1 on the form ff14 which is displayed in window w3.

The screenshot displays a terminal window with a graphical user interface. At the top, a 'Command Line' window contains the text 'setval ff14 i1 \*\*\*zzz\*\*\*'. To the right, a large box labeled 'form ff1' contains the text 'zzz', 'xxx', and 'zzz', with a label '<-v3' to its right. Below these are several smaller forms: 'form ff2' (two T-shaped icons), 'form ff3' (a horizontal bar), 'form ff5' (a complex geometric shape), 'form ff6' (a vertical bar), and 'form ff3' (a horizontal bar). In the bottom left, there are two 'form ff4' boxes, each containing three small squares. To their right is a 'blnk line' label and a box containing the text '12345678'. At the bottom of the terminal, there are three lines of text: 'Line 21 Display: .....,', 'Line 22 .....,', and 'Line 23 .....,'. The bottom status bar shows 'MSG: 0' on the left and 'application' on the right.

Figure 5-89b Case 1 Result

The VALUE clause defines the value of i1 to be "zzz". Since i2 has a value clause set as "i1", "zzz" is also displayed as that field's value.

Command Line window 1		setval ff8 i2 '._time'		form ff1	
<div></div>		<div></div>		<div>ZZZ XXX ZZZ &lt;-v3</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		blnk line 12345678		<div></div>	
form ff4				form ff6	
<div></div>				<div></div>	
form ff3					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-90a SETVAL Test Case 2

Define the value of the item i2 on ff8 to be the built-in TIME function.

Command Line window 1		setval ff8 i2 '. _time'		form ff1	
				zzz xxx zzz <-v3	
form ff2		form ff2		form ff3	
form ff4		form ff8 blnk line 9:41:04		form ff5	
form ff4				form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-90b Case 2 Result

The current time appears in the item field i2 on form ff8.

Command Line window 1		setval ff3 i1 ""12"" + 2		form ff1	
<div></div>		<div></div>		<div>ZZZ XXX ZZZ</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div></div>	
form ff4		form ff8		form ff5	
<div></div>		blnk line		<div></div>	
<div></div>		9:41:05		form ff6	
<div></div>				<div></div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-91a SETVAL Test Case 3

Define the value of the item field i1 on the form ff3 to be the expression "12" + 2.

Command Line		setval ff3 i1 ""12"" + 2		form ff1	
window 1				<div> <div>zzz</div> <div>xxx</div> <div>zzz</div> </div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div>		<div>form ff3</div> <div>14 14</div>		<div>form ff5</div> <div>form ff6</div>	
<div>form ff4</div> <div>form ff8</div> <div>9:41:05</div>		<div>form ff3</div> <div>14 14</div>			
Line 21 Display: ..... Line 22 ..... Line 23 ..... MSG: 0					
application					

Figure 5-91b Case 3 Result

Since the item field i1 is a repeated field on the form ff3, the result of evaluating the expression, 14, is placed in each array instance. This test also shows that the appropriate conversion is done to perform the arithmetic.

Command Line		inqabs ff1 v3		form ff1	
window 1				222	xxx
				522	
				<-v3	
form ff2		form ff2	form ff3	form ff5	form ff6
form ff2		form ff2	14 14	form ff5	form ff3
form ff4		form ff8			
form ff4		blnk line			
form ff4		9:41:06			
Line 21 Display: row = 3 col = 60 .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-92a INQABS Test Case 1 with Result

Return the absolute position of window w3 on the form ff1. It is row 3 and column 60.

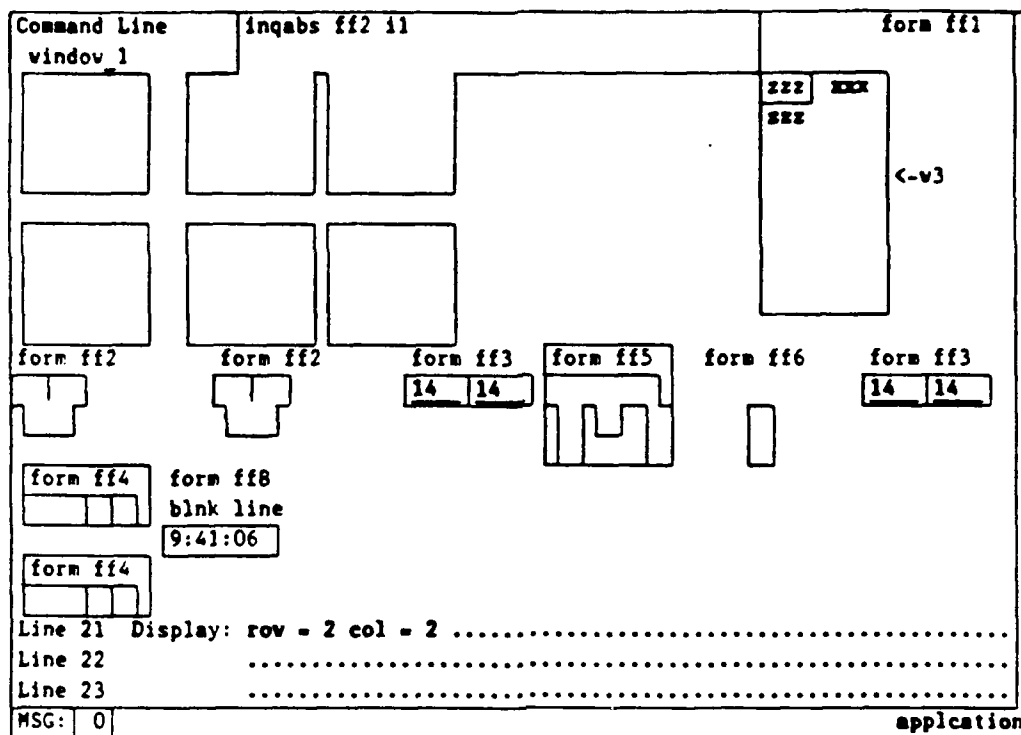


Figure 5-92b INQABS Test Case 2 with Result

Return the absolute position of item i1 on form ff2. It is row 2 and column 2.



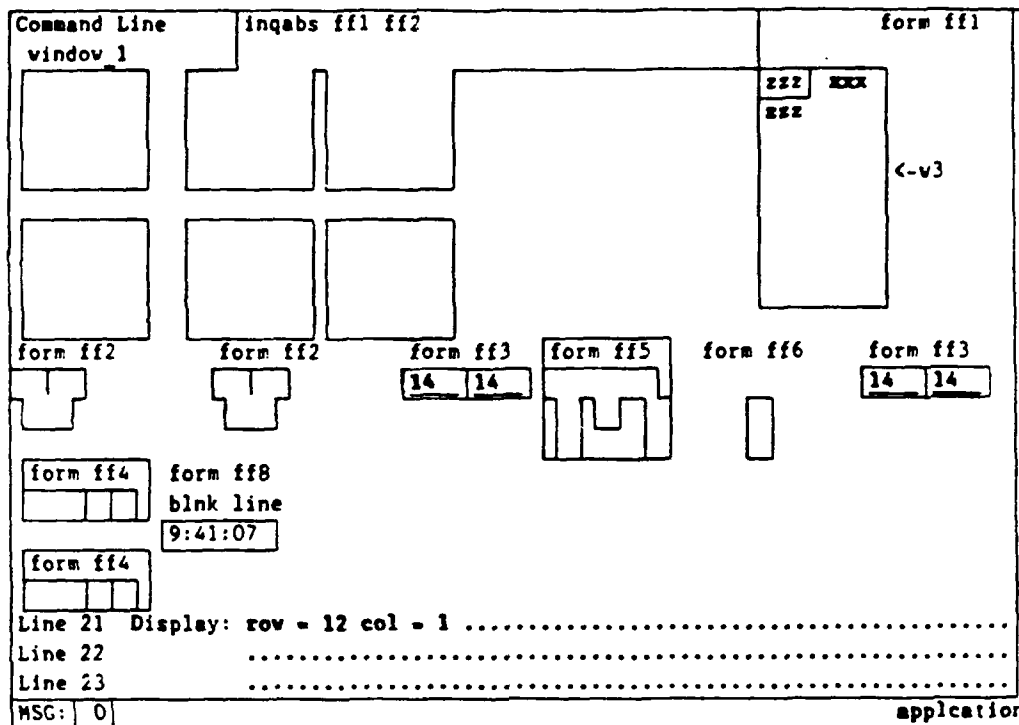


Figure 5-92c INQABS Test Case 3 with Result

Return the absolute position of form ff2 on form ff1. It is row 12 and column 1.

Command Line		window 1		ingatt ff1 " " " " 1		form ff1	
						<div> <div>222</div> <div>222</div> </div> <div> <div>XXX</div> </div> <div>(-v3)</div>	
form ff2		form ff2		form ff3		form ff5	
				14 14		14 14	
form ff4		form ff8		form ff6		form ff3	
		blnk line				14 14	
9:41:07							
form ff4							
Line 21		Display: BLACKFG					
Line 22							
Line 23							
MSG: 0						application	

Figure 5-93a INQATT Test Case 1 with Result

Return the first attribute defined for the form ff1. It is BLACKFG.

Command Line		window 1		inqatt ff1 blackfg d		form ff1	
						222 222 222 222 <-v3	
form ff2		form ff2		form ff3		form ff5	
				14 14		form ff6	
form ff4		form ff8		form ff3		form ff3	
		blink line		14 14			
		9:41:08					
form ff4							
Line 21		Display: BLACK					
Line 22							
Line 23							
MSG: 0						application	

Figure 5-93b INQATT Test Case 2 with Result

Inquire what the display color associated with the attribute BLACKFG is. It is black.

Command Line		Inqatt ff1 blackfg b		form ff1	
window 1				<div>zzz xxx</div> <div>zzz</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div>		<div>form ff3</div> <div>14 14</div>		<div>form ff5</div> <div>form ff6</div>	
<div>form ff4</div> <div>form ff8</div> <div>blnk line</div> <div>9:41:08</div>		<div>form ff3</div> <div>14 14</div>			
<div>Line 21 Display: WHITE .....</div> <div>Line 22 .....</div> <div>Line 23 .....</div>					
MSG: 0		application			

Figure 5-93c INQATT Test Case 3 with Result

Inquire what the background color associated with the attribute BLACKFG is. It is white.

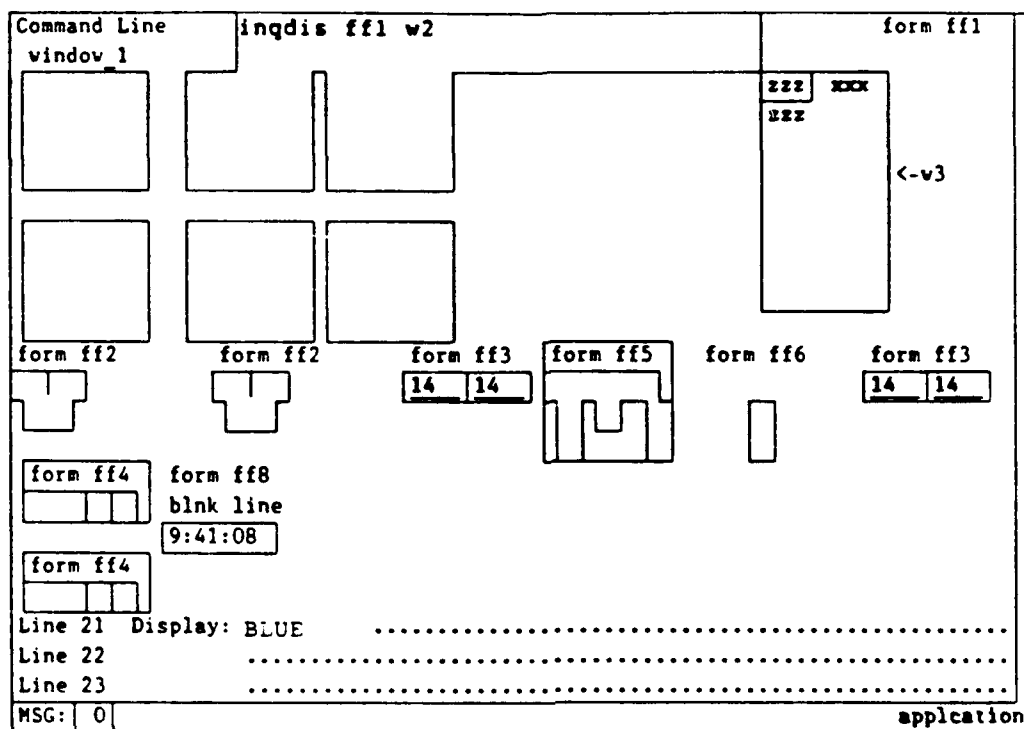


Figure 5-94a INQDIS Test Case 1 with Result

Return the background color attribute for ffl. It is BLUE.

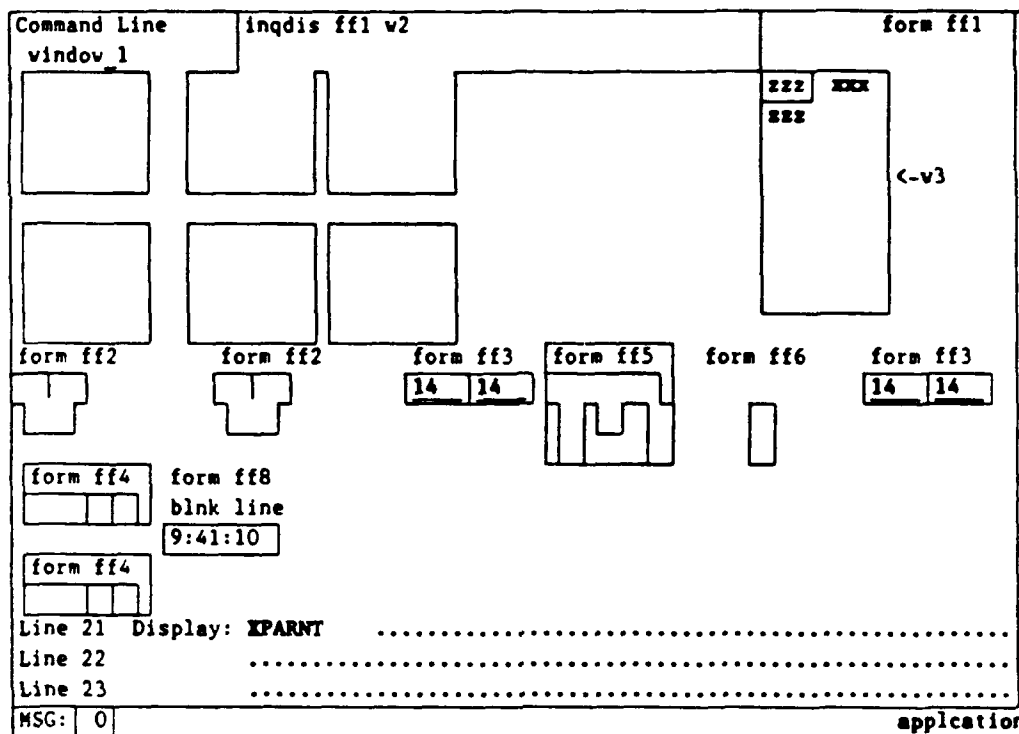


Figure 5-94b INQDIS Test Case 2 with Result

Return the background color attribute for the window w2 on the form ff1. It is XPARNT.

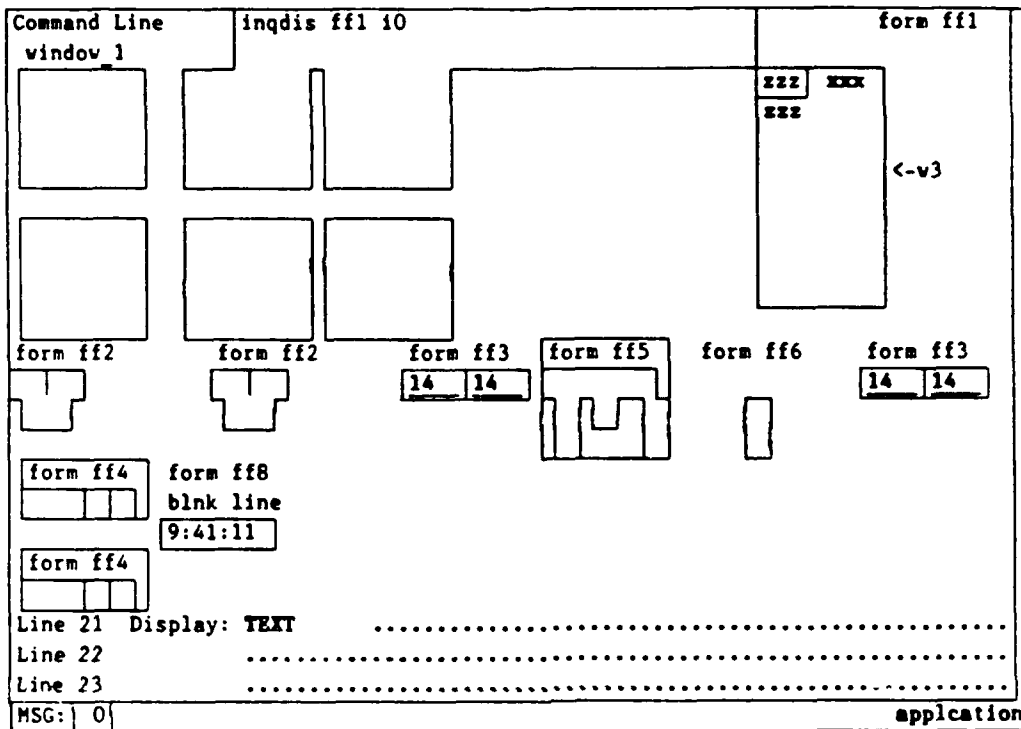


Figure 5-94c INQDIS Test Case 3 with Result

return the background color attribute for the form ff2 on the form ff1. It is XPARNT.

Command Line		inqdis ff1 ff2		form ff1	
window 1				222 XXX 222 ←v3	
form ff2		form ff2		form ff3	
form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6	
form ff4		blnk line		form ff3	
form ff4		9:41:10		form ff3	
Line 21 Display: XPARNT		.....		application	
Line 22		.....			
Line 23		.....			
MSG: 0					

Figure 5-94d INQDIS Test Case 4 with Result

Return the display attribute for the item field i0 on the form ff1. It is TEXT.



Command Line		inqdis ff1 i99		form ff1	
window 1				<div> <div>zzz</div> <div>xxx</div> <div>zzz</div> </div> <div>&lt;-v3</div>	
form ff2	form ff2	form ff3	form ff5	form ff6	form ff3
<div></div>	<div></div>	<div>14</div> <div>14</div>	<div></div>	<div></div>	<div>14</div> <div>14</div>
form ff4	form ff8				
<div></div>	blnk line				
	9:41:12				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	1	Field not found			application

Figure 5-94e INQDIS Test Case 5 with Result

Inquire what is the display attribute for a non-existent field, i99, on form ff1. The message "Field not found" is sent to the message line.

Command Line		inqdis ff56 i4		form ff1	
window 1				<div>zzz xxx</div> <div>zzz</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		9:41:13		form ff3	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 2		Form not found		application	

Figure 5-94f INQDIS Test Case 6 with Result

Inquire what the display attribute is for a field on a nonexistent form, ff56. The message "Form not found" is sent to the message line.

Command Line window 1		inqdom ff2 i2 7		form ff1	
				zzz xxx zzz  <-v3	
form ff2		form ff2		form ff3	
				14 14	
form ff4		form ff8		form ff5	
		blk line 9:41:13		form ff6  	
form ff4				form ff3	
				14 14	
Line 21 Display: NUMERIC, MINIMUM 1, MAXIMUM 6.....					
Line 22 .....					
Line 23 .....					
MSG: 2		Form not found			application

Figure 5-95 INQDOM Test Case with Result

Return the entire DOMAIN clause associated with the item field i2 on form ff2. It is NUMERIC, MINIMUM 1, MAXIMUM 6.

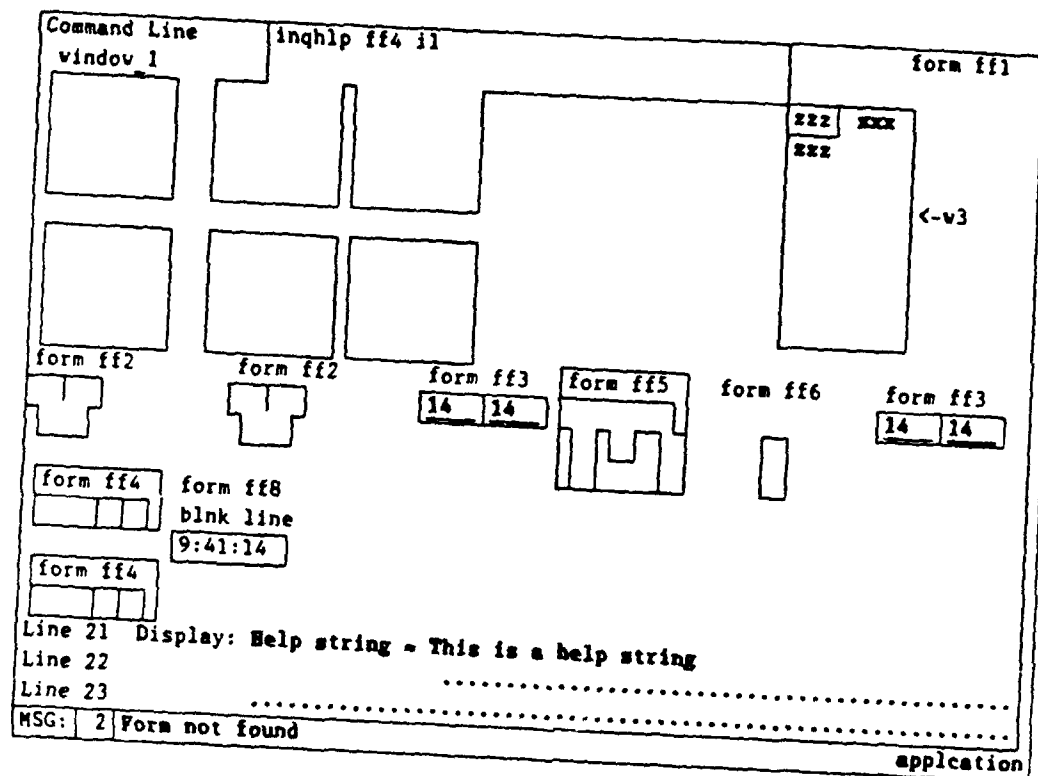


Figure 5-96a INQHLP Test Case 1 with Result

Inquire what the "help" associated with the item field i1 on form ff4 is. The help for this field is the string "This is a help string".

Command Line		inqhlp ff5 i1		form ff1	
window_1				ZZZ XXX ZZZ <-v3	
form ff2		form ff2		form ff3	
form ff2		form ff5		form ff6	
form ff4		form ff8		form ff3	
form ff4		blnk line		form ff3	
form ff4		9:41:16		form ff3	
Line 21		Display: Application Help		.....	
Line 22		.....		.....	
Line 23		.....		.....	
MSG: 2		Form not found		application	

Figure 5-96b INQHLP Test Case 2 with Result

Inquire what is "help" associated with the item field i1 on the form ff5 is. The help has defined to be application help.

The screenshot displays a terminal window with a graphical user interface. At the top, there is a header bar with the text "Command Line" on the left, "inqhlp ff1 i4" in the center, and "form ff1" on the right. Below this, the main area contains several rectangular boxes representing forms. On the left, there is a large box labeled "window\_1". To its right, there are several smaller boxes, some of which are labeled "form ff2", "form ff3", "form ff5", "form ff6", and "form ff3". Some of these boxes contain text or numbers, such as "14" and "14". There are also some boxes with text like "zzz", "xxx", and "zzz". A label "<-v3" is positioned to the right of one of the boxes. At the bottom of the terminal window, there is a status bar with the text "Line 21 Display: Belp form - PATBCOM", "Line 22", "Line 23", and "MSG: 2 Form not found". The text "application" is visible on the far right of the status bar.

Figure 5-96c INQHLP Test Case 3 with Result

Inquire what is the "help" associated with the item field i4 on the form ff1. The help is the form PATHCOM.

The screenshot displays a terminal window with a graphical user interface. At the top, there are labels for 'Command Line window 1', 'inqloc ff14 i3', and 'form ff1'. The main area contains several rectangular boxes representing forms. Some boxes are labeled 'form ff2', 'form ff3', 'form ff5', 'form ff6', and 'form ff3'. One box contains the text 'ZZZ XXX' and 'ZZZ'. Another box contains the text '<-v3'. Below the forms, there are labels for 'form ff4', 'form ff8', and 'form ff4'. A label 'blnk line' is also present. At the bottom, there is a status bar with the text 'Line 21 Display: I1, 2, 2, 0; I1, 3, 1, 3 .....', 'Line 22 .....', 'Line 23 .....', and 'MSG: 2 Form not found'. The word 'application' is visible in the bottom right corner.

Figure 5-97a INQLOC Test Case 1 with Result

Return the location of the item field i3 on the form ff14. The location is specified relative to the field i1 and is adjacent to i1.

Command Line		inqloc ff1 i4		form ff1	
window 1				<div> <div>zzz</div> <div>xxx</div> <div>zzz</div> <div>xxx</div> </div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff2</div>		<div>form ff3</div> <div>form ff5</div> <div>form ff6</div>		<div>form ff3</div>	
<div>form ff4</div> <div>form ff4</div>		<div>form ff8</div> <div>blnk line</div> <div>9:41:19</div>			
Line 21 Display: ;, 1, 1, 0; ;, 1, 1, 19 ..... Line 22 ..... Line 23 .....					
MSG: 2		Form not found		application	

Figure 5-97b INQLOC Test Case 2 with Result

Return the location of the item field i4 on the form ff1. The position of field i4 is offset 1 row 19 columns from the origin of ff1.



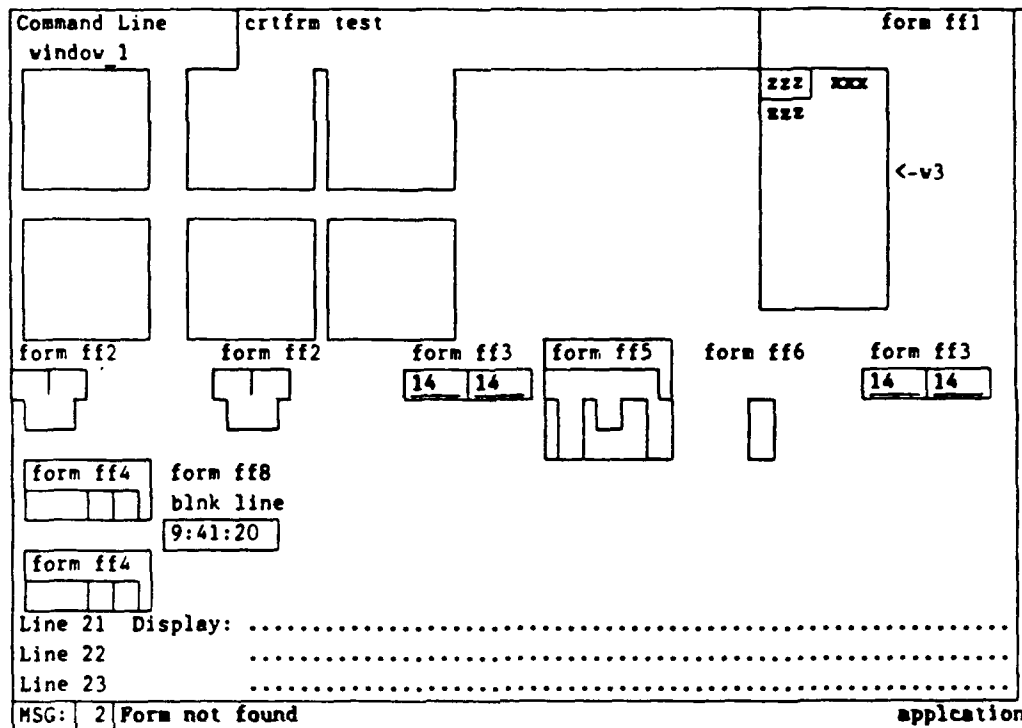


Figure 5-98a INQPRO Test Preparation

Create the form test.

Command Line		rp1frm v3 1 test		form ff1	
window 1					
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff3	
		blnk line			
		9:41:21			
Line 21 Display:		.....			
Line 22		.....			
Line 23		.....			
MSG: 2		Form not found		application	

Figure 5-98b Display the Form Test

Add the form test to window w3.

Command Line window 1	setpro test " 1 1 1	" test ; 1 1 0 ;	form ff1
			test
			<-v3
form ff2	form ff2	form ff3	form ff5
		14 14	
form ff4	form ff8		form ff6
	blnk line		
	9:41:22		form ff3
			14 14
Line 21	Display: .....		
Line 22	.....		
Line 23	.....		
MSG: 2	Form not found		application

Figure 5-98c Add First Prompt

Add the form prompt "test".

Command Line window_1	setpro test " 1 1 1	" abcd ; 1 1 1 ;	form ff1
			test abcd  <-v3
form ff2	form ff2	form ff3 14 14	form ff5
			form ff6
form ff4	form ff8 blnk line 9:41:23		form ff3 14 14
form ff4			
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG: 2 Form not found			application

Figure 5-98d Add Second Prompt

Add the form prompt "abcd".

Command Line		setpro test "		" test ; 1 1 2 ;		form ff1	
window 1		1 1 1				test abcd test  <-v3	
form ff2		form ff2		form ff3		form ff5	
T		T		14 14		form ff6	
						form ff3	
						14 14	
form ff4		form ff8					
blnk line		9:41:24					
form ff4							
Line 21 Display: .....							
Line 22 .....							
Line 23 .....							
MSG: 2		Form not found				application	

Figure 5-98e Add Third Prompt

Add another form prompt "test".

Command Line		inqpro test " " 1		form ff1	
window 1				test abcd test ←v3	
form ff2		form ff2		form ff3	
form ff4		form ff8 blnk line 9:41:24		form ff5	
form ff4				form ff6	
Line 21 Display: 4, "test" ;, 1, 1, 0; ;, 1, 1, 1 .....				form ff3	
Line 22 .....					
Line 23 .....					
MSG: 2 Form not found				application	

Figure 5-99a INQPRO Test Case 1 with Result

Return the first prompt string attached to the form test. It is the string "test". The location of the prompt is also returned and is 0 rows and 1 column from the upper left corner of the form test.

The screenshot displays a terminal window with a graphical user interface. At the top, there are labels for different sections: "Command Line", "window\_1", "inqpro test", "2", and "form ff1". Below these, there are several rectangular boxes representing forms. Some are labeled "form ff2", "form ff3", "form ff5", "form ff6", and "form ff3". One form contains the text "test", "abcd", and "test". Another form contains the text "14" and "14". A label "<-v3" is positioned to the right of one of the forms. At the bottom, there is a status bar with the text "MSG: 2 Form not found" and "application".

Command Line

window\_1

inqpro test

2

form ff1

test

abcd

test

<-v3

form ff2

form ff2

form ff3

form ff5

form ff6

form ff3

14

14

form ff4

form ff8

blnk line

9:41:25

form ff4

Line 21 Display: 4, "abcd" ;, 1, 1, 1; ;, 1, 1, 1 .....

Line 22 .....

Line 23 .....

MSG: 2 Form not found

application

Figure 5-99b INQPRO Test Case 2 with Result

Return the second prompt string attached to the form test. It is the string "abcd". The location of the prompt is also returned and is 1 row and 1 column from the upper left corner of the containing form.

Command Line	inqpro test "	" 4	form ff1
window 1			test abcd test  <-v3
form ff2	form ff2	form ff3	form ff5
		14 14	
form ff4	form ff8		form ff3
	blnk line		14 14
	9:41:26		
form ff4			
Line 21	Display:	.....	
Line 22		.....	
Line 23		.....	
MSG:	3	Invalid index specified	
			application

Figure 5-99c INQPRO Test Case 3 with Result

Inquire about a nonexistent prompt string on the form test. The error message "Invalid Index Specified" is returned.



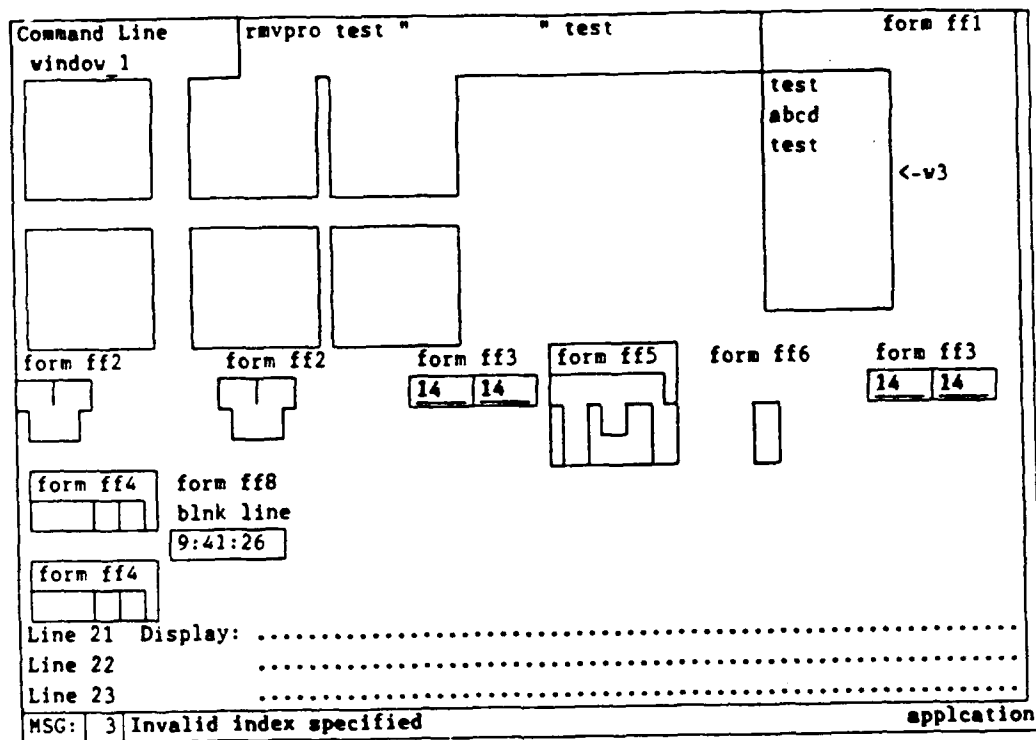


Figure 5-100a RMVPRO Test Case

Remove the prompt string "test" from the form test.

Command Line	rmvpro test "	" test	form ff1
window 1			abcd
			<-v3
form ff2	form ff2	form ff3	form ff5
		14 14	
form ff4	form ff8		form ff6
	blnk line		
	9:41:26		
form ff4			form ff3
			14 14
Line 21	Display:	.....	
Line 22		.....	
Line 23		.....	
MSG:	3	Invalid index specified	application

Figure 5-100b Test Result

Since the prompt string "test" occurs twice, they are both removed.

Command Line window 1

inqdim ff1 ff4 1

form ff1

abcd

<-v3

form ff2

form ff2

form ff3

form ff5

form ff6

form ff3

form ff4

form ff8

blnk line

9:41:27

form ff4

Line 21 Display: direct V tot elements 2 disp ele 2 spaces 1 .....

Line 22 .....

Line 23 .....

MSG: 3 Invalid index specified

application

Figure 5-101a INQDIM Test Case 1 with Result

Return the first repeat specification of the field ff4 on the form ff1. The form ff4 is repeated vertically twice with one intervening space and both elements are displayed.

Command Line window 1		inqdim ff1 ff4 2		form ff1	
				abcd ←v3	
form ff2		form ff2		form ff3 14 14	
form ff4		form ff5		form ff6	
form ff8 blnk line 9:41:27		form ff3 14 14		form ff3 14 14	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 4		Array not found			application

Figure 5-101b INQDIM Test Case 2 with Result

Inquire about a nonexistent repeat specification. The error message "Array Not Found" is displayed in the message line.

Command Line window 1		inqsiz ff3 i1		form ff1	
<div></div>		<div></div>		<div>abcd</div>	
<div></div>		<div></div>		<div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div>14 14</div>	
form ff4		form ff8		form ff3	
<div></div>		blnk line		<div>14 14</div>	
<div></div>		9:41:28			
Line 21 Display: width = 4, depth = 1 .....					
Line 22 .....					
Line 23 .....					
MSG: 4		Array not found			application

Figure 5-102a INQSIZ Test Case 1 with Result

Return the SIZE specification for the item field i1 on the form ff3. The field has a width of 4 and a depth of 1.

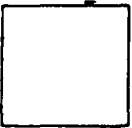
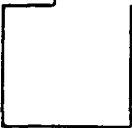

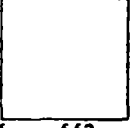





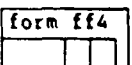

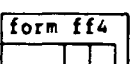
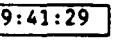

Command Line window 1		inqsiz ff1 ff3		form ff1	
					
					
form ff2		form ff2		form ff3	
					
form ff4		form ff8		form ff3	
		blnk line			
					
Line 21 Display: width = 10, depth = 4 .....					
Line 22 .....					
Line 23 .....					
MSG: 4		Array not found			application

Figure 5-102b INQSIZ Test Case 2 with Result

Return the SIZE specification of the form field ff3 on the form ff1. The field has a width of 10 and a depth of 4.

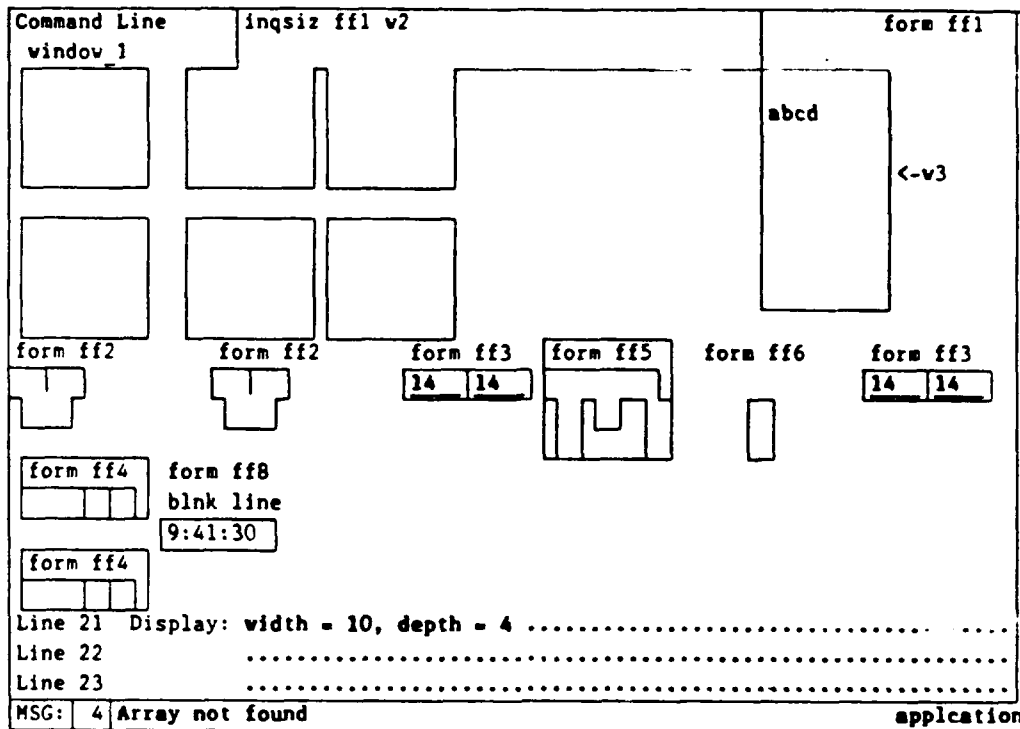


Figure 5-102c INQSIZ Test Case 3 with Result

Return the SIZE specification of the window field w2 on the form ff1. The field has a width of 10 and a depth of 4.

Command Line		inqtyp ff1 ff2		form ff1	
window 1				abcd ←w3	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		9:41:30		form ff6	
Line 21 Display: F.....		Line 22 .....		Line 23 .....	
MSG: 4 Array not found				application	

Figure 5-103a INQTYT Test Case 1 with Result

Inquire what type of the field ff2 on the form ff1 is. The type returned is "F" for form.



The screenshot displays a terminal window with a graphical user interface. At the top, a title bar reads "Command Line window 1". The main area contains several rectangular boxes and text elements:

- Top right: "form ff1" above a box containing "abcd" and "<-v3".
- Top left: "inqtyp ff1 i0".
- Middle row: "form ff2" above a box, "form ff2" above a box, "form ff3" above a box containing "14" and "14", "form ff5" above a box containing a complex pattern, "form ff6" above a box, and "form ff3" above a box containing "14" and "14".
- Bottom left: "form ff4" above a box, "form ff8" above a box, "blnk line" above a box, and "9:41:30" above a box.
- Bottom right: "form ff4" above a box.

At the bottom of the terminal, there is a status bar with the following text:

```
Line 21 Display: I.....
Line 22 .....
Line 23 .....
MSG: 4 Array not found
```

The word "application" is visible in the bottom right corner of the image.

Figure 5-103b INQTYP Test Case 2 with Result

Inquire what the type of the field i0 on the form ff1 is. The type returned is "I" for item.

Command Line window 1		inqtyp ff1 v2		form ff1	
<div></div>		<div></div>		<div>abcd</div>	
<div></div>		<div></div>		<div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div>14 14</div>	
form ff4		form ff8		form ff5	
<div></div>		blnk line		<div></div>	
<div></div>		<div>9:41:31</div>		form ff6	
form ff4				<div></div>	
<div></div>				form ff3	
<div></div>				<div>14 14</div>	
Line 21 Display: W.....					
Line 22 .....					
Line 23 .....					
MSG:	4	Array not found			
					application

Figure 5-103c INQTP Test Case 3 with Result

Inquire what type of the field w2 on the form ff1 is. The type returned is "W" for window.

Command Line		inqval ff1 i3 20		form ff1	
window 1				abcd	
				<-w3	
form ff2		form ff2		form ff3	
				14 14	
form ff4		form ff8		form ff5	
		blk line		form ff6	
		9:41:32			
form ff4				form ff3	
				14 14	
Line 21 Display: "Display:" .....					
Line 22 .....					
Line 23 .....					
MSG: 4		Array not found			application

Figure 5-104 INQVAL Test Case with Result

Return the VALUE clause defined for the item field i3 on the form ff1. The result is "Display:".

Command Line  
window 1

rmvatt: ff1 blackfg

form ff1

abcd

<-v3

form ff2

form ff2

form ff3

form ff5

form ff6

form ff3

form ff4

form ff8

blk line

9:41:32

form ff4

Line 21 Display: .....

Line 22 .....

Line 23 .....

MSG: 4 Array not found

application

Figure 5-105a RMVATT Test Case 1

Remove the ATTRIBUTE clause defining the attribute BLACKFG for the form ffl.

Command Line	inqatt ff1 "	" "	" 1	form ff1
windov 1				abcd
				<-v3
form ff2	form ff2	form ff3	form ff5	form ff6
		14 14		
				form ff3
				14 14
form ff4	form ff8			
	blnk line			
	9:41:33			
form ff4				
Line 21	Display: REDPG	.....		
Line 22		.....		
Line 23		.....		
MSG:	4	Array not found		application

Figure 5-105b Verify Case 1 Result

The INQATT routine is used to verify that the attribute definition for BLACKFG has been deleted. BLACKFG was formerly the first attribute associated with form ff1. The first attribute is now REDFG.

Command Line		rmvatt ff1 redfg		form ff1	
window 1				abcd	
				<-v3	
form ff2		form ff2		form ff3	
				14 14	
				form ff5	
				form ff6	
				form ff3	
				14 14	
form ff4		form ff8			
		blnk line			
		9:41:34			
form ff4					
Line 21 Display:		.....			
Line 22		.....			
Line 23		.....			
MSG: 4		Array not found		application	

Figure 5-105c RMVATT Test Case 2

Remove the ATTRIBUTE clause defining REDFG as an attribute associated with the form ff1.

Command Line		window 1		inqatt ff1 redifg b		form ff1	
						abcd	
						<-v3	
form ff2		form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6		form ff3	
form ff4		blnk line					
form ff4		9:41:34					
Line 21		Display:		.....		.....	
Line 22				.....		.....	
Line 23				.....		.....	
MSG:		5		Attribute does not exist		application	

Figure 5-105d Verify Case 2 Result

The INQATT routine is used to verify that the attribute definition for REDFG has been deleted. This time the background color belonging to the attribute REDFG is requested. The message "Attribute does not exist" is issued proving the attribute definition has been deleted.

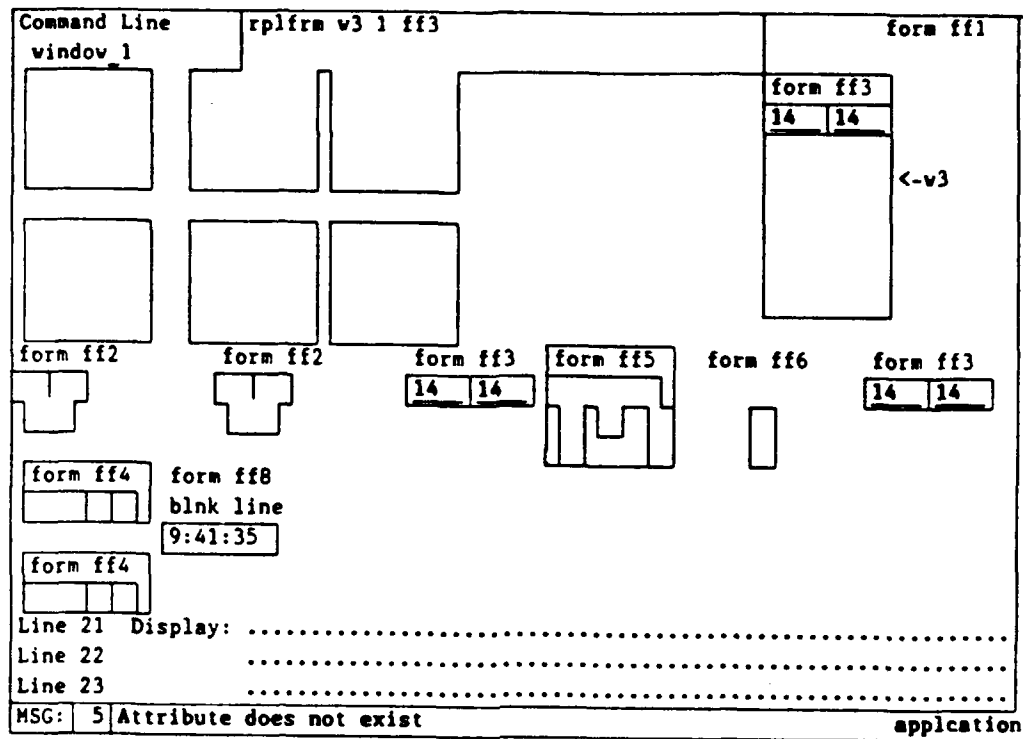


Figure 5-106 RMVDIM Test Preparation

Add the form ff3 to window w3.



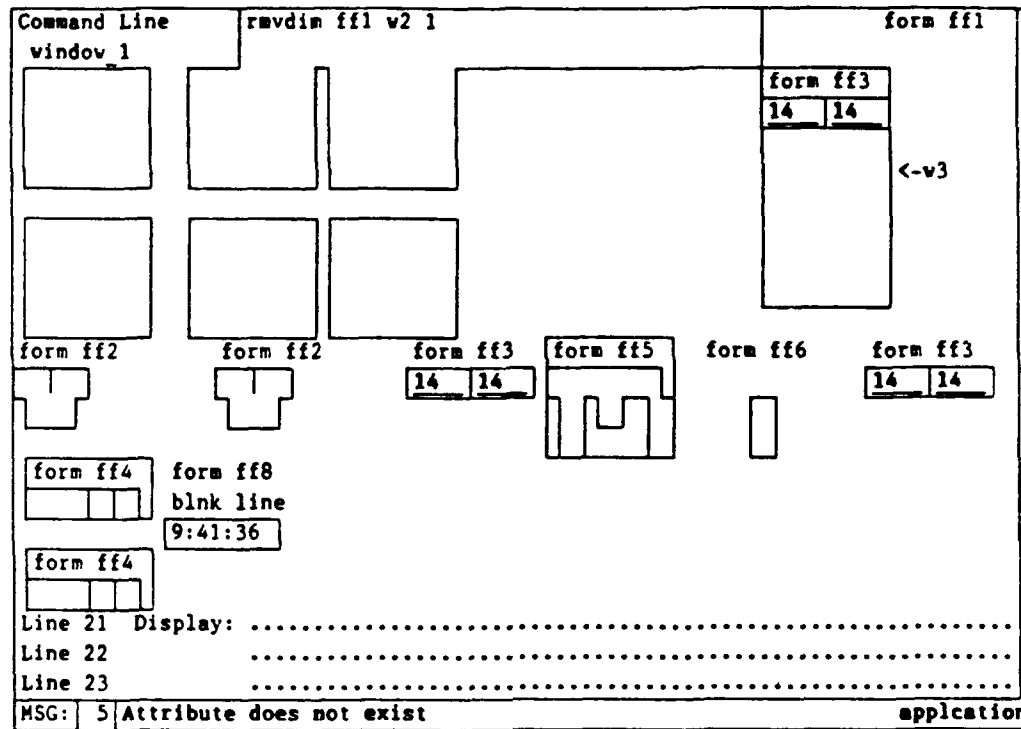


Figure 5-107a RMVDIM Test Case

The first repeat specification for the window field w2 on the form ff1 is removed.

Command Line		rmvdim ff1 w2 1		form ff1	
window 1				form ff3	
				14 14	
				<-w3	
form ff2		form ff2		form ff3	
form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6	
form ff4		blnk line		form ff3	
form ff4		9:41:36		form ff3	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 5 Attribute does not exist				application	

Figure 5-107b Test Result

Only the second repeat specification, horizontal repetition, remains for the field w2.

Command Line		rmvdom ff2 i2		form ff1	
window 1				form ff3	
				14 14	
				<-v3	
form ff2		form ff2		form ff3	
				14 14	
form ff4		form ff8		form ff5	
		blnk line		form ff6	
		9:41:37		form ff3	
				14 14	
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 5 Attribute does not exist				application	

Figure 5-108a RMVDOM Test Case

Remove the domain clause defined for the item field i2 on the form ff2. The INQDOM test in Figure 5-95, show that the domain options for this field are defined as NUMERIC, MINIMUM 1, MAXIMUM 6.

Command Line window 1		inqdom ff2 12 7		form ff1	
				form ff3 14 14 ←-v3	
form ff2		form ff2		form ff3 14 14	
form ff4		form ff8 blnk line 9:41:38		form ff5	
form ff4				form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 7		Domain value not found		application	

Figure 5-108b Verify Test Result

Inquire what the domain clause defined for the item field i1 on the form ff2 is after having deleted it. The message "Value Clause Not Found" is issued verifying that the DOMAIN clause has indeed been dropped.

Command Line		inqdom ff2 i2 7		form ff1					
window 1				<table border="1"> <tr> <td colspan="2">form ff3</td> </tr> <tr> <td>14</td> <td>14</td> </tr> </table>		form ff3		14	14
form ff3									
14	14								
				<-v3					
form ff2		form ff2		form ff3					
				14 14					
form ff4		form ff5		form ff6					
form ff8		form ff3		form ff3					
blnk line		14 14		14 14					
9:42:25									
Line 21 Display: .....									
Line 22 .....									
Line 23 .....									
MSG: 9 This is a help string				application					

Figure 5-109 RMVHLP Test Preparation

Position the cursor in the item field i1 on the form ff4 and press the <HELP> key to obtain the help associated with the field. The "help" is a text string "This is a help string". Press the <ENTER> key to continue.

Command Line		rmvhlp ff4 i1		form ff1	
window 1				form ff3	
				14 14	
				<-v3	
form ff2		form ff2		form ff3	
form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6	
form ff4		blnk line		form ff3	
form ff4		9:42:28		form ff3	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-110a RMVHLP Test Case

Remove the help information defined for the item field i1 on the form ff4.

Command Line		inqhlp ff4 i1		form ff1	
windov 1				form ff3	
				14 14	
				<-v3	
form ff2		form ff2		form ff3	
				14 14	
				form ff5	
				form ff6	
				form ff3	
				14 14	
form ff4		form ff8			
		blink line			
		9:42:30			
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1 No help available				application	

Figure 5-110b Verify Test Result

Inquire what help is defined for the item field i1 on ff4 using INQHLP. The message "No help available" verifies that the help has been deleted.

Command Line		rmvary ff3 i1		form ff1	
window 1				<div>form ff3</div> <div>14 14</div> <div>&lt;-v3</div>	
<div>form ff2</div> <div>form ff2</div> <div>form ff4</div> <div>form ff4</div>		<div>form ff2</div> <div>form ff3</div> <div>form ff5</div> <div>form ff6</div>		<div>form ff3</div> <div>form ff8</div> <div>9:42:30</div>	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 1 No help available				application	

Figure 5-111a RMVARY Test Case

Remove the entire repeat specification for the item field i1 on the form ff3.



Command Line window 1		inqual ff1 10 20		form ff1	
<div></div>		<div></div>		<div>form ff3</div> <div>14</div> <div>&lt;-v3</div>	
<div></div>					
form ff2		form ff2		form ff3	
<div></div>		<div>14</div>		form ff5	
				form ff6	
form ff4		form ff8		form ff3	
<div></div>		blnk line		<div>14</div>	
<div></div>		9:42:31			
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		No help available			
application					

Figure 5-111b Test Case Result

Only one occurrence of the item field i1 is now displayed on the form ff3.

Command Line		inqual ff1 i0 20		form ff1	
window 1				form ff3 14 <-v3	
form ff2		form ff2		form ff3	
form ff2		form ff3		form ff5	
form ff4		form ff8		form ff6	
form ff4		blnk line		form ff3	
form ff4		9:42:32		14	
Line 21 Display: "form ff1" .....					
Line 22 .....					
Line 23 .....					
MSG: 1		No help available			
application					

Figure 5-112 RMVVAL Test Preparation

Use INQVAL to first obtain the VALUE clause defined for the item field i0 on the form ff1. It is defined as the string "form ff1".

Command Line		rmvval ff1 i0		form ff1	
window 1				form ff3 14 ←v3	
form ff2		form ff2		form ff3 14	
form ff4		form ff8 blnk line 9:42:33		form ff5 14	
form ff4				form ff6	
Line 21 Display: .....				form ff3 14	
Line 22 .....					
Line 23 .....					
MSG: 1 No help available				application	

Figure 5-113a RMVVAL Test Case

Remove the VALUE clause defined for the item field i0 on the form ff1.

Command Line		pdata ff1.i0 "		form ff1	
vindow_1				form ff3	
				14	
				<-v3	
form ff2		form ff2		form ff3	
				14	
form ff4		form ff5		form ff6	
form ff8				form ff3	
blnk line				14	
9:42:34					
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 1		No help available			application

Figure 5-113b Verify Test Case

The value of the item field still displays as "form ff1" because no new data have been assigned to it. Use PDATA to assign blanks to i0.

Command Line		pdata ff1.i0 "			
window 1					
				form ff3 14 <-v3	
form ff2		form ff2		form ff3 14	
form ff4		form ff8 blk line 9:42:34		form ff5	
form ff4				form ff6	
Line 21 Display: .....		Line 22 .....		form ff3 14	
Line 23 .....					
MSG: 1 No help available				application	

Figure 5-113c Test Case Result

The "form ff1" value in field i0 is now gone.

Command Line		inqual ff1 i0 20	
window 1			
		form ff3 14 ←-v3	
form ff2		form ff2	form ff3 14
form ff4		form ff8 blnk line 9:42:34	form ff5
form ff4			form ff6
Line 21 Display: .....		form ff3 14	
Line 22 .....			
Line 23 .....			
MSG:	1	No help available	
		application	

Figure 5-113d Another RMVVAL Verification

Use INQVAL to verify that the VALUE clause has been removed.  
This is shown by the error message "Value Clause Not Found".

Command Line		savfrm ff1 c	
window 1			
		form ff3 14 ←v3	
form ff2		form ff2	form ff3 14
form ff4		form ff5	form ff6
form ff8 9:42:36		form ff3 14	
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG: 2		Value clause not found	
		application	

Figure 5-114a SAVFRM Test Case 1

The definition of the form ff1 is to be compiled and written out in compiled (FD) form.

Command Line		savfrm ff1 b	
window 1			
		form ff3 14 ←-v3	
form ff2	form ff2	form ff3 14	form ff5
form ff4	form ff8 blnk line 9:42:39		form ff6
form ff4			form ff3 14
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG: 2 Value clause not found		application	

Figure 5-114b SAVFRM Test Case 2

The definition of the form ff1 is to be compiled and written out in both compiled (FD) form and in source (FDL) form.



Command Line		savfrm ff1 s			
window 1				form ff3 14 ←v3	
form ff2		form ff2		form ff3 14	
form ff4		form ff8 blk line 9:42:43		form ff5 14	
form ff4				form ff6	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 2		Value clause not found		application	

Figure 5-114c SAVFRM Test Case 3

The definition of the form ff1 is to be written out in source (FDL) form.

Command Line		rplfrm v3 1 ff14			
window 1					
		222 222 222 222 ←v3			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff3
		14			14
form ff4	form ff8				
	blnk line				
	13:48:38				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-115 APRFLD Test Preparation

Use RPLFRM to display form ff14 in window w3. This form contains three item fields. I2 is an output field whose value is defined to be i1 and i3 is displayed depending on the value of its APPEARS IF clause.

The screenshot displays a terminal window with a graphical user interface. At the top, the title bar reads "Command Line window 1". The main area contains several elements:

- A large rectangular area on the left, possibly a placeholder for a logo or image.
- A smaller rectangular area below it.
- A large rectangular area on the right, containing the text "zzz" and "zzz" stacked vertically, and a label "<-v3" to its right.
- A row of six small rectangular boxes, each labeled "form ff2", "form ff2", "form ff3", "form ff5", "form ff6", and "form ff3" from left to right. Below these boxes are various graphical elements, including a small "T" shape, a larger "T" shape, a box containing "14", a complex geometric shape, a small vertical rectangle, and another box containing "14".
- Below the row of boxes, there are two more boxes labeled "form ff4", each containing three small squares.
- Below the "form ff4" boxes, there is a label "form ff8", the text "blk line", and a box containing the time "13:48:57".
- At the bottom, there are three lines of text: "Line 21 Display: .....", "Line 22 .....", and "Line 23 .....".
- In the bottom left corner, there is a label "MSG:" followed by a box containing "0".
- In the bottom right corner, there is a label "application".

Figure 5-116a APRFLD Test Case 1 with Result

Set the display flag to nondisplay. Item i3 does not appear on the screen.

Command Line		aprfld v3.ff14.i3 a	
window 1			
		222 XXX 222 ←v3	
form ff2		form ff2	form ff3
		14	form ff5
			form ff6
form ff4		form ff8	form ff3
		blnk line	14
		13:49:11	
form ff4			
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG:	0	application	

Figure 5-116b APRFLD Test Case 2 with Result

Set the display flag to display. Item i3 appears on the screen.

Command Line		aprfld v3.ff14.i3 t			
windov 1					
		zzz zzz ←v3			
form ff2	form ff2	form ff3	form ff5	form ff6	form ff3
		14			14
form ff4	form ff8				
	blnk line				
	13:49:26				
form ff4					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-116c APRFLD Test Case 3 with Result

Toggle the display flag. Item i3 does not appear on the screen.

Command Line		aprfld v3.ff14.i3 t			
window 1					
<div></div>		<div>zzz xxx zzz ←v3</div>			
<div></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff3
<div></div>	<div></div>	14	<div></div>	<div></div>	14
form ff4	form ff8				
<div></div>	blnk line				
	13:49:37				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-116d APRFLD Test Case 4 with Result  
Toggle the display flag. Item i3 appears on the screen.

The screenshot shows a window titled "Command Line" with the text "window 1" and "rplfrm w3 1 ff20". Below the title bar, there are several rectangular boxes representing forms. On the left, there are two empty boxes. In the center, there are several boxes labeled "form ff2", "form ff3", "form ff5", "form ff6", and "form ff3". Some of these boxes contain the number "14". Below these, there are boxes labeled "form ff4" and "form ff8", with the text "blink line" and the time "13:49:56" below them. At the bottom left, there are three lines of text: "Line 21 Display: .....", "Line 22 .....", and "Line 23 .....". Below these, there is a box labeled "MSG:" with the value "0". On the right side, there is a box labeled "<-v3". At the bottom right, the word "application" is visible.

Figure 5-117 INQAPR Test Preparation

Use RPLFRM to display the form ff20 in window w3. Item i3 does not appear.

Command Line		window 1		inqapr ff20 i3 50	
<div></div>		<div></div>		<div></div>	
<div></div>		<div></div>		<div></div>	
form ff2		form ff2		form ff3	
<div></div>		<div></div>		<div>14</div>	
form ff4		form ff8		form ff5	
<div></div>		blink line		<div></div>	
<div></div>		<div>13:49:56</div>		form ff6	
form ff4				<div></div>	
<div></div>				form ff3	
				<div>14</div>	
Line 21 Display: (('i1;'>10) ? (1) : (0)) .....					
Line 22 .....					
Line 23 .....					
MSG: 0		application			

Figure 5-118 INQAPR Test Case 1 with Result

Find out what the current appears if criterion defined for item i3 is. It appears if the value of i1 is greater than 10.



[illegible]

Figure 5-119 SETAPR Error Test

Enter an invalid expression for the appears if criterion. The message "Error in expression" is displayed.

The screenshot shows a terminal window with a complex graphical user interface. At the top, a command line displays the command: `setapr ff20 i3 "not('i1'>i0)"`. Below this, the window is divided into several sections. On the left, there are two empty rectangular boxes. To the right of these, there are several labeled forms: `form ff2` (two identical T-shaped icons), `form ff3` (a box containing the number 14), `form ff5` (a complex geometric shape), `form ff6` (a vertical rectangle), and `form ff3` (another box containing the number 14). Below these forms, there are two more `form ff4` labels, each followed by a row of three small squares. In the center, the text `form ff8` is displayed above a `blk line` and a timestamp `13:56:53`. On the far right, a vertical rectangle contains the text `xxx` and `<-v3`. At the bottom of the window, there are three lines of text: `Line 21 Display: .....`, `Line 22 .....`, and `Line 23 .....`. In the bottom left corner, a small box contains the text `MSG: 0`. In the bottom right corner, the word `application` is visible.

Figure 5-120 SETAPR Test Case with Result

Define the appears if criterion for item i3 to be not i1 greater than 10. Since the value of i1 is blank, i3 appears.

The screenshot displays a terminal window with a complex graphical user interface. At the top, a command line reads "inqapr ff20 i3 5". Below this, the window is divided into several sections. On the left, there are two empty rectangular boxes, one above the other, with the label "window\_1" next to the top one. To the right of these boxes is a large rectangular area containing the text "XXX" and a label "<-v3". Below the left boxes are two small T-shaped icons, each labeled "form ff2". To their right is a box labeled "form ff3" containing the number "14". Further right is a box labeled "form ff5" containing a complex geometric shape. To the right of that is a box labeled "form ff6" containing a vertical rectangle. On the far right is a box labeled "form ff3" containing the number "14". Below the T-shaped icons are two boxes labeled "form ff4", each containing three small squares. To the right of these is a box labeled "form ff8" containing the text "blk line" and a timestamp "13:57:16". At the bottom of the window, there are three lines of text: "Line 21 Display: NOT(' .....", "Line 22 .....", and "Line 23 .....". In the bottom left corner, a message box reads "MSG: 1 Field value too long - truncated". In the bottom right corner, the word "application" is visible.

Figure 5-121 INQAPR Test Case 2 with Result

Use INQAPR to verify the appears if criterion defined for i3. The message "Field value too long - truncated" is displayed because a buffer size of 5 is not long for the expression.

The screenshot displays a terminal window with a graphical user interface. At the top left, the text "Command Line" and "window 1" is visible. The main area contains several rectangular boxes and forms, some labeled "form ff2", "form ff3", "form ff4", "form ff5", "form ff6", and "form ff8". Some of these forms contain the number "14". A "blk line" (blank line) is also present. The bottom of the window shows a command prompt "MSG: 0" and a series of dots representing a list of lines (Line 21, Line 22, Line 23). The text "application" is visible in the bottom right corner.

Figure 5-122 INQAPR Test Case 3 with Result

Use INQAPR again with a larger buffer size. The criterion defined previously using SETAPR is returned.


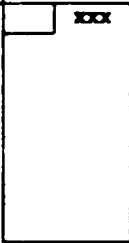



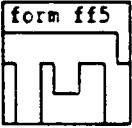


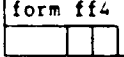
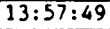
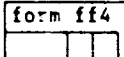
Command Line		rmvapr ff20 il	
window 1			
			
		<-v3	
			
form ff2		form ff2	
			
		form ff3	
			
		form ff5	
			
		form ff6	
			
		form ff3	
		form ff8	
form ff4		blnk line	
			
			
form ff4			
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG: 1		Value clause not found	
		application	

Figure 5-123 RMVAPR Test Case 1 with Result

Use RMVAPR to delete the appears if criterion defined for an item field. In this case, il does not have any criterion defined. The message "Value clause not found" is displayed.

Command Line		pdata w3.ff20.il " 20"			
window 1					
<div></div>		<div>20 20</div>			
		<-v3			
<div></div>					
form ff2	form ff2	form ff3	form ff5	form ff6	form ff3
<div></div>	<div></div>	<div>14</div>	<div></div>	<div></div>	<div>14</div>
form ff4	form ff8				
<div></div>	blnk line				
	13:58:08				
form ff4					
<div></div>					
Line 21 Display: .....					
Line 22 .....					
Line 23 .....					
MSG:	0	application			

Figure 5-124 RMVAPR Test Preparation

Use PDATA to enter the value "20 " in il so that i3 disappears.

Command Line		rmvapr ff20 i3			
window 1				<div>20 XXX</div> <div>20</div> <div>&lt;-v3</div>	
form ff2		form ff2		form ff3	
form ff4		form ff8		form ff5	
form ff4		blnk line		form ff6	
form ff4		13:58:22		form ff3	
Line 21 Display: .....		Line 22 .....		Line 23 .....	
MSG: 0				application	

Figure 5-125 RMVAPR Test Case 2 with Result

Remove the appears if criterion defined for the item i3. The field appears.

Command Line		inqapr ff20 i3 50	
window 1			
		<div style="border: 1px solid black; padding: 2px;"> 20 20 </div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> 20 20 </div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> 20 20 </div>	
		<-v3	
form ff2	form ff2	form ff3	form ff5
		14	
form ff4	form ff8		form ff6
	blnk line		
	13:58:43		
form ff4			form ff3
			14
Line 21 Display: .....			
Line 22 .....			
Line 23 .....			
MSG:	1	Value clause not found	
			application

Figure 5-126 RMVAPR Test Verification

Use INQAPR to verify that the appears if criterion for i3 was removed. The message "Value clause not found" is displayed. Press <QUIT> to return to the IISS Function Screen and then press <QUIT> again to complete this Unit Test.



APPENDIX A

VT100 KEYPAD LAYOUTS

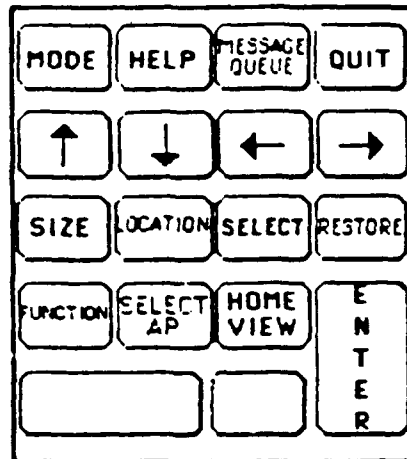


Figure A-1 Window Manager Mode

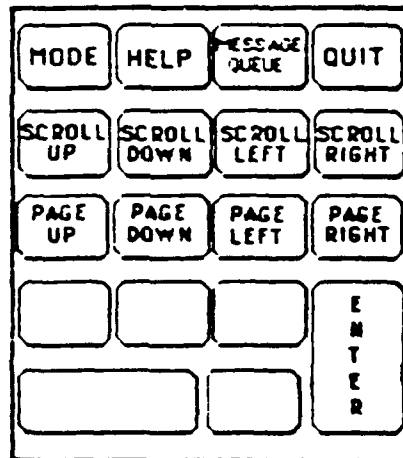


Figure A-2 Scroll/Page Mode

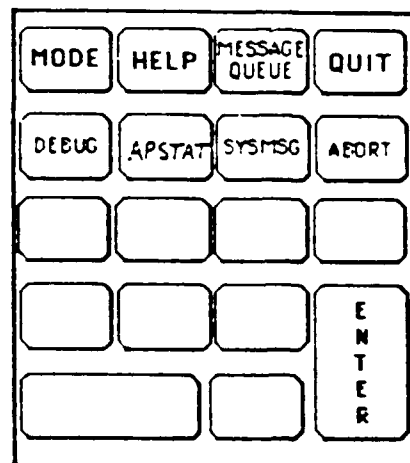


Figure A-3 Status Mode

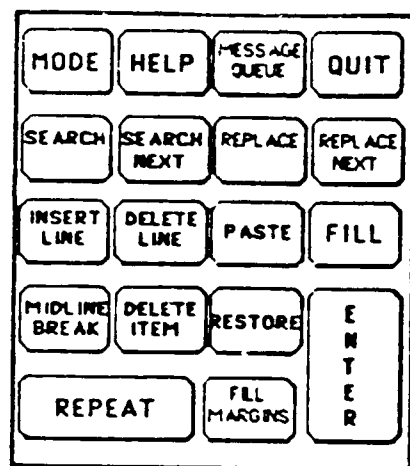


Figure A-4 Text Editor Mode

APPENDIX B

FP TEST FORMS

/\* these forms are for testing form processor \*/

CREATE FORM ARTESTP

prompt center at 1 40 "ARTEST Parameters"

item parm1

at 3 10

size 10

display as input

prompt at left "parm1"

item parm2

at 5 10

size 10

display as input

prompt at left "parm2"

item parm3

at 7 10

size 10

display as input

prompt at left "parm3"

item parm4

at 9 10

size 10

display as input

prompt at left "parm4"

CREATE FORM ff1

ATTRIBUTE blackfg (background white, display black)

ATTRIBUTE redfg (background white, display red)

ATTRIBUTE greenfg (background black, display green)

ATTRIBUTE yellowfg (background black, display yellow)

ATTRIBUTE bluefg (background white, display blue)

ATTRIBUTE magenta fg (background white, display magenta)

ATTRIBUTE cyanfg (background black, display cyan)

ATTRIBUTE whitefg (background black, display white)

BACKGROUND blue

PROMPT AT 1 2 "Command Line"

PROMPT AT 21 2 "Line 21"

PROMPT AT 22 2 "Line 22"

PROMPT AT 23 2 "Line 23"  
PROMPT AT 24 2 "Line 24"  
PROMPT AT 25 2 "Line 25"  
PROMPT AT 26 2 "Line 26"  
PROMPT AT 27 2 "Line 27"  
PROMPT AT 28 2 "Line 28"  
PROMPT AT 29 2 "Line 29"  
PROMPT AT 30 2 "Line 30"  
PROMPT AT 31 2 "Line 31"  
PROMPT AT 32 2 "Line 32"  
PROMPT AT 33 2 "Line 33"  
PROMPT AT 34 2 "Line 34"  
PROMPT AT 35 2 "Line 35"  
PROMPT AT 36 2 "Line 36"  
PROMPT AT 37 2 "Line 37"  
PROMPT AT 38 2 "Line 38"  
PROMPT AT 39 2 "Line 39"  
PROMPT AT 40 2 "Line 40"  
PROMPT AT 41 2 "Line 41"  
PROMPT AT 42 2 "Line 42"  
PROMPT AT 43 2 "Line 43"  
PROMPT AT 44 2 "Line 44"  
PROMPT AT 45 2 "Line 45"  
PROMPT AT 46 2 "Line 46"  
PROMPT AT 47 2 "Line 47"  
PROMPT AT 48 2 "Line 48"  
PROMPT AT 49 2 "Line 49"  
PROMPT AT 50 2 "Line 50"  
PROMPT AT 51 2 "Line 51"  
PROMPT AT 52 2 "Line 52"  
PROMPT AT 53 2 "Line 53"  
PROMPT AT 54 2 "Line 54"  
PROMPT AT 55 2 "Line 55"  
PROMPT AT 56 2 "Line 56"  
PROMPT AT 57 2 "Line 57"  
PROMPT AT 58 2 "Line 58"  
PROMPT AT 59 2 "Line 59"  
PROMPT AT 60 2 "Line 60"  
PROMPT AT 61 2 "Line 61"  
PROMPT AT 62 2 "Line 62"  
PROMPT AT 63 2 "Line 63"  
PROMPT AT 64 2 "Line 64"  
PROMPT AT 65 2 "Line 65"  
PROMPT AT 66 2 "Line 66"  
PROMPT AT 67 2 "Line 67"  
PROMPT AT 68 2 "Line 68"  
PROMPT AT 69 2 "Line 69"

item i0  
at 1 70  
size 8  
display as text  
value "form ff1"

item i3  
at 21 11  
size 8  
display as text  
value "Display:"

item i4  
at 1 20  
size 40 by 2  
display as input  
help pathcom

WINDOW w1 (2 v 1)  
AT 3 2  
SIZE 10 BY 4  
background white  
appears if 'ff1.ff6.i1' < "11111"

WINDOW w2(2 v 1, 2 H 1)  
AT 3 15  
SIZE 10 BY 4  
background xparnt

WINDOW wnf  
at 3 45  
size \* by \*  
background green

WINDOW w3  
at 3 60  
size 10 by 8  
background yellow

form ff2 (2 h 4)  
at 12 1  
size 12 by 4

form ff3  
at 12 32  
size 10 by 4

form ff4 (2 v 1)  
at 16 2  
size 10 by 2

form ff5  
at 12 43  
size 10 by 4

form ff6  
at 12 55  
size 10 by 4

form ff7  
at 12 68  
size 10 by 4

form ff8  
at 16 13  
size 10 by 4

item fqn  
at 21 20  
size 60 by 3  
display as output

CREATE FORM ff2  
prompt at 1 2 "form ff2"

item i1(2 h 1)  
at 2 2  
size 2  
display as input

item i2  
at 3 2  
size 3  
domain (NUMERIC MAXIMUM 6 MINIMUM 1)  
display as input

create form ff3  
prompt at 1 2 "form ff3"

item i1(2 v 1, 2 h 1)  
at 2 2  
size 3  
display as input

```
create form ff4  
background black  
prompt at 1 2 "form ff4"
```

```
item i1  
at 2 2  
size 4  
display as input  
help "This is a help string"
```

```
create form ff5  
background white  
prompt at 1 2 "form ff5"
```

```
item i1  
at 3 3  
size 1 by 2  
display as input  
help application
```

```
create form ff6  
background xparnt  
prompt at 1 2 "form ff6"
```

```
item i1  
at 3 6  
size 1 by 4  
display as input
```

```
create form ff7  
prompt at 1 2 "form ff7"
```

```
item i1(3/6 v 0, 2/4 h 1)  
at 2 2  
size 1  
display as input
```

```
create form ff8  
prompt at 1 2 "form ff8"
```

```
item i1  
at 3 2  
size 8  
display as input
```

```
create form ff9
```

prompt at 1 2 "form ff9"

item i1  
at 2 2  
size 8  
display as input

window w4  
at 3 1  
size 10 by 5  
display as black

create form ff10  
size 10 by 8  
prompt at 1 2 "Form ff10"

item i1 (\* v)  
at 2 2  
size 4  
display as input

create form ff11  
size 10 by 8  
prompt at 1 2 "Form ff11"

item i1 (4/ \* v)  
at 2 2  
size 4  
display as input

create form pathcom

item i4  
at 3 47  
size 1  
display as input  
help morhelp

prompt at 1 30 "Commands for ARTEST"  
prompt at 3 30 " More Commands:"  
prompt at 5 10

"-----"

prompt at 6 9 "add form to a window form"	addfrm window
prompt at 7 9 "delete pages from window page"	rmvpag window



```
prompt at 8 9 "replace page in window          rplfrm window page
form"
prompt at 9 9 "close form                      clsfrm form"

prompt at 10 9 "put data to form item array    pdata path data"
prompt at 11 9 "get data from form item array  gdata
inst(0=prev,1=cur) path"

prompt at 12 9 "change attributes: background  putbak path
dur(prm=0,tmp=1) attrib"
prompt at 13 9 "get attributes: background     getbak path
dur(prm=0,tmp=1)"
prompt at 14 9 "put and get temp attributes(b) tmpbak path dur
attrib"

prompt at 15 9 "get name of form on page n      gpage window
page"
prompt at 16 9 "get number of pages in window  gwindo window"

prompt at 17 9 "put cursor to field            putcur path"
prompt at 18 9 "window set(term within term)   oiscr path"

prompt at 19 9 "change attributes: foreground  putatt path
dur(prm=0,tmp=1) attrib"
prompt at 20 9 "get attributes: foreground     getatt path
dur(prm=0,tmp=1)"
prompt at 21 9 "put and get temp attributes(f) tmpatt path dur
attrib"
```

create form morhelp

```
item i4
at 3 47
size 1
display as input
help arthlp2
prompt at left "More More Commands"
prompt at 2 28 "More Commands for ARTEST"
prompt at 4 10
"-----"

prompt at 5 9 "open logical device            opnldv returns
ldvid"
prompt at 6 9 "close logical device          clsldv
ldvid(except 'HOME')"
```

```
prompt at 7 9 "set logical device          setldv ldvid row
col width depth"
prompt at 8 9 "change logical device        chgldv
ldvid(default is 'HOME')"
```

```
prompt at 9 9 "inquire logical device      inqldv returns
ldvid"
```

```
prompt at 10 9 "put data to Virtual Terminal putvti data"
prompt at 11 9 "get data from Virtual Terminal getvti "
prompt at 12 9 "parse fully qualified name   parfqn
lev(0=1st,1=fst,-1=nxt2lst,etc)"
prompt at 13 50 "use pf16(0) first"
prompt at 14 9 "get default qualified name   getdqn"
prompt at 15 9 "set default qualified name   setdqn path"
prompt at 16 9 "put message line string     pmsgls string"
prompt at 17 9 "put message line code       pmsglc code"
prompt at 18 9 "output a screen             outscr path"
prompt at 19 9 "put cursor at a location     putloc path row
column"
prompt at 20 9 "get the length of a buffer   gdatln path"
```

```
create form arthlp2
prompt at 2 28 "More Commands for ARTEST"
prompt at 3 10
"-----"
prompt at 5 9 "add an element to an array    addelm path"
prompt at 6 9 "open a form                  opnfrm form"
prompt at 8 10
"-----"
prompt at 9 23 "Special Function Key Definitions"
prompt at 10 10
"-----"
prompt at 11 20 "use pf16(0) to display path name of cursor
position"
prompt at 12 20 "use pf15(3) to send screen to printer (to call
'prntvt')"
```

```
prompt at 13 20 "use pf17(.) to refresh the screen (to call
'rfshvt')"
```

```
create form ff12
item i1
display as input
at 1 2
size 8 by 5
```

```
create form ff13
item i1
```

display as input  
at 1 2  
size 6 by 34

create form ff14  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
value "xxx"  
size 3

create form ff15  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 2 > 1  
value "xxx"  
size 3

create form ff16  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 2 < 1  
value "xxx"  
size 3

create form ff17  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 'i1' != 1  
value "xxx"  
size 3

create form ff18  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1

appears if between('i1', 1, 10)  
value "xxx"  
size 3

create form ff19  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if in('i1', 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10)  
value "xxx"  
size 3

create form ff20  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 'i1' > 10 ? 1 : 0  
value "xxx"  
size 3

create form ff21  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 'i1' > "CCC" ? 1 : 0  
value "xxx"  
size 3

create form ff22  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if NOT 'i1'  
value "xxx"  
size 3

create form ff23  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output

at 3 right of i1  
appears if IN(BETWEEN('i1', 1, 10), 1, 2, 3, 4)  
value "xxx"  
size 3

create form ff24  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if IN(BETWEEN('i1', "AAA", "CCC"), 1, 2, 3, 4)  
value "xxx"  
size 3

create form ff25  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if IN(BETWEEN('i1', "AAA", "CCC"), "AAA", "BBB", "CCC",  
"DDD")  
value "xxx"  
size 3

create form ff26  
item i1  
display as input

at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if NOT APPEARS('i1')  
value "xxx"  
size 3

create form ff27  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if APPEARS('i1')  
value "xxx"  
size 3

create form ff28  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3



```
item i3
display as output
at 3 right of i1
appears if APPEARS('ff24.i1')
value "xxx"
size 3
```

```
create form ff29
item i1
display as input
at 1 2
size 3
```

```
item i2
display as output
at 2 2
value 'i1'
size 3
```

```
item i3
display as output
at 3 right of i1
appears if 'i1' >= 1 ? 'i1' = 5 ? 1 : 0 : 1
value "xxx"
size 3
```

```
create form ff30
item i1
display as input
at 1 2
size 3
```

```
item i2
display as output
at 2 2
value 'i1'
size 3
```

```
item i3
display as output
at 3 right of i1
appears if NOT IN('i1' >= 1 ? 'i1' = 5 ? 1 : 0 : 1, 1, 2, 3)
value "xxx"
size 3
```

```
create form ff31
item i1
```

display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 'i1' <= 0 OR 'i1' >= 10  
value "xxx"  
size 3

create form ff32  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if 'i1' != 11 AND 'i1' >= 10  
value "xxx"  
size 3

create form ff33  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if GWINDO('.w3') > 1  
value "xxx"  
size 3

create form ff34  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if CURSOR('i2')  
value "xxx"  
size 3

create form ff35  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if gpage('.w3', 1) = "FF3"  
value "xxx"  
size 3

create form ff36

item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if getatt('i1', 0) != "INPUT"  
value "xxx"  
size 3

create form ff37  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if not getatt('i1', 0) != "INPUT"  
value "xxx"  
size 3

create form ff38  
prompt at 1 4 "ff38"

item i1  
display as input  
at 2 2  
size 3

item i2  
display as output

at 2 6  
value 'i1'  
size 3

form f1  
at 4 2  
appears if 'i1' > 10 ? 1 : 0  
size 7 by 6

create form f1  
prompt at 1 2 "F1"

create form ff39  
item i1  
display as input  
at 1 2  
size 3

item i2  
display as output  
at 2 2  
value 'i1'  
size 3

item i3  
display as output  
at 3 right of i1  
appears if not role("manager")  
value "xxx"  
size 3